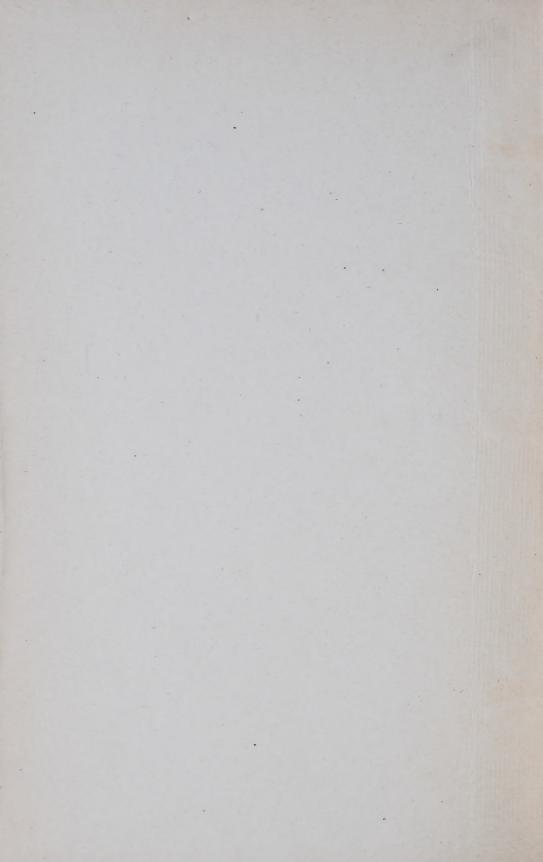
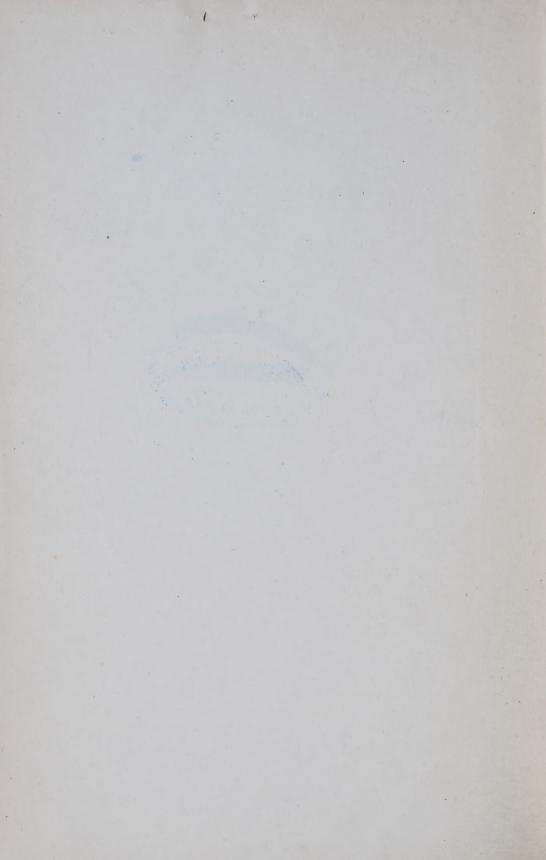
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# FORTY-SECOND ANNUAL REPORT

OF THE

# DEPARTMENT OF MARINE AND FISHERIES

1908-9

# FISHERIES

PRINTED BY ORDER OF PARLIAMENT



OTTAWA
PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY
1909

A. 1910

To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, a Baronet, G.C.M.G., &c., &c., Governor General of Canada.

# MAY IT PLEASE YOUR EXCELLENCY:

I have the honour to submit herewith, for the information of Your Excellency and the legislature of Canada, the forty-second Annual Report of the Department of Marine and Fisheries, Fisheries Branch.

I have the honour to be, Your Excellency's most obedient servant,

L. P. BRODEUR,

Minister of Marine and Fisheries.

DEPARTMENT OF MARINE AND FISHERIES, OTTAWA, October, 1909.

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# DEPUTY MINISTER'S REPORT

To the Honourable L. P. BRODEUR,

Minister of Marine and Fisheries.

Sir,—I have the honour to submit the annual report of the Fisheries Branch of this department for the fiscal year ending on March 31 last. There are embraced in this report the customary statements of expenditure and revenue, and the several reports of the district inspectors of fisheries, together with reports on the work of the fish hatcheries operated under Dominion auspices in the various provinces, fishery protection service, &c., and a review of the fishing bounty system during the fiscal year.

Two special reports are appended to this report; one on 'The Marine and Fisheries Committee and the Lobster Fishery,' by Mr. R. N. Venning, Superintendent of Fisheries; and the other on 'The Fish and Fisheries of Manitoba,' by Professor E. E. Prince, F.R.S.C., &c., Dominion Commissioner of Fisheries, and member of the International Fisheries Commission.

There are 21 appendices to this report, in the following order:—

- No. 1. Fisheries Expenditure and Revenue.
  - 2. Fishing Bounties.
  - 3. Nova Scotia Fisheries.
  - 4. New Brunswick Fisheries.
  - 5. Prince Edward Island Fisheries.
  - 6. Quebec Fisheries.
  - 7. Ontario Fisheries.
  - 8. Manitoba Fisheries.
  - 9. Saskatchewan Fisheries.
  - 10. Alberta Fisheries.
  - 11. Yukon Fisheries.
  - 12. British Columbia Fisheries.
  - 13. Fish Breeding Operations.
  - 14. Oyster Culture.
  - 15. Bait Cold Storage.
  - 16. List of Fishery Officers (Outside staff).
  - 17. Fisheries Protection Service.
  - 18. Prosecutions, &c., for Violation of Fisheries Act.
  - 19. Herring and Herring Curing.
  - 20. Steam Trawling.
  - 21. Natural History.

#### CHANGE IN ORGANIZATION.

During the year that has just closed an important change in the organization of the responsibilities of deputyship devolving upon the officer who had previously been Deputy Minister of Marine.

When in 1892, the Department of Marine and the Department of Fisheries were amalgamated, it involved the abolition of the office of Deputy Minister of Fisheries, the responsibilities of deputyship devolving upon the officer who had previously been Deputy Minister of Marine.

The arrangement, however, contemplated the appointment of an officer of scientific attainments, having skill in marine biology who would be technical adviser to the Fisheries Branch. For this important position Professor Prince was selected for his special qualifications and was appointed Commissioner of Fisheries, which imposed upon him executive as well as scientific work.

For a considerable time past the commissioner has been able to give little attention to the executive or administration work of the branch, his time practically being wholly occupied by scientific work in connection with marine biology, and acting as chairman of commissions of inquiry into the conditions of the fisheries in various sections of the Dominion.

Moreover, after the treaty for the unification of fishery regulations in waters contiguous to the boundary line between Canada and the United States was negotiated, Professor Prince was appointed the Canadian representative under its provision by order in council of December 3, 1908.

It was also felt that the time had come when more vigorous scientific researches into fish life should be made, in order that the department might have the advantage of the information that could be thus afforded when considering regulations and legislation that would best conserve the fisheries without imposing needless restrictions on the operations of the fishermen.

To achieve this end and in order that the department might be able to utilize its officers to the best advantage, it was decided to relieve Professor Prince of all administrative work in the department, so that he might devote such of his time as was not occupied in his work on the International Fisheries Commission, and such other commissions of inquiry on which he might be appointed from time to time, to scientific work. He could thus be in a position to act in a general way as scientific adviser on matters relating to the Fisheries Branch.

Accordingly Mr. R. N. Venning, who previously held the position of Assistant Commissioner of Fisheries, was, by order in council of January 25, 1909, appointed Superintendent of Fisheries, and the administrative work of the Fisheries Branch was placed in his charge.

#### THE INTERNATIONAL FISHERIES TREATY.

For years past the burden of the complaint of the fishermen, particularly along the Great Lakes and in the southern portion of British Columbia has been, that while they

have been labouring under the disabilities of restrictive regulations on the Canadian side of the international boundary line, commercial fishing, with all its attendant advantages, was proceeding on the opposite side, in some instances within their very sight, without hindrance and practically untrammelled by legislation or executive action, and it was therefore not unnatural that the department should be importuned with constant requests from the fishermen that they should be placed on an equitable footing with their competitors just across an imaginary line.

It is not intended to imply that the different bordering States ignored their obligations in the direction of the betterment of their fisheries interests in waters contiguous to the international boundary line; but it would seem and it may be fairly said that the authorities on this side of the line have evidently been imbued to a greater degree with the idea of the necessity for legislation restricting the operations of the fishermen, looking to the protection of spawning fish.

Though the government has at times been approached by State authorities with requests for concerted action, looking to the betterment of the fisheries conditions in certain specified waters contiguous to the boundary, it felt that in view of the dissatisfaction as to the conditions obtaining all along the boundary line, a patchwork policy did not commend itself, and such proposals were answered to the effect that the only acceptable way in which to deal with the matter was by the consideration of an arrangement by which uniform regulations suitable to the different waters adjacent to the boundary line from the Atlantic to the Pacific, and which would be enforced in connection with the operations on both sides of the line, could be reached.

The treaty, of which the following is a copy, culminated:-

(215)

A Treaty between Great Britain and the United States concerning the Fisheries in waters contiguous to the Dominion of Canada and the United States, signed at Washington on April 11, 1908.

His Majesty Edward the Seventh, of the United Kingdom of Breat Britain and Ireland, and the British Dominions beyond the Seas, King, and Emperor of India, and the United States of America, equally recognizing the desirability of uniform and effective measures for the protection, preservation, and propagation of the food fishes in the waters contiguous to the Dominion of Canada and the United States, have resolved to conclude a convention for these purposes, and have named as their plenipotentiaries

His Britannic Majesty, the Right Honourable James Bryce, O.M., His Majesty's Ambassador Extraordinary and Plenipotentiary at Washington; and

The President of the United States of America, Elihu Root, Secretary of State of the United States;

Who, having exchanged their full powers, found in due form, have agreed to and signed the following articles:—

Art. I.—The times, seasons, and methods of fishing in the waters contiguous to Canada and the United States as specified in Art. IV. of this convention, and the nets, engines, gear, apparatus, and appliances which may be used herein, shall be fixed and determined by uniform and common international regulations, restrictions and provisions; and to that end the high contracting parties agree to appoint, within

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three months after this convention is proclaimed, a commission to be known as the International Fisheries Commission, consisting of one person named by each government.

Art. II.—It shall be the duty of this International Fisheries Commission, within six months after being named, to prepare a system of uniform and common international regulations for the protection and preservation of the food fishes in each of the waters prescribed in Art. IV. of this convention, which regulation shall embrace close seasons, limitations as to the character, size, and manner of use of nets, engines, gear, apparatus, and other appliances; a uniform system of registry by each government in waters where required for the more convenient regulation of commercial fishing by its own citizens or subjects within its own territorial waters or any part of such waters; an arrangement for concurrent measures for the propagation of fish; and such other provisions and measures as the commission shall deem necessary.

Art. III.—The two governments engage to put into operation and to enforce by legislation and executive action, with as little delay as possible, the regulations, restrictions, and provisions with appropriate penalties for all breaches thereof; and the data when they shall be put into operation shall be fixed by the concurrent proclamations of the Governor General of the Dominion of Canada in Council and of the President of the United States.

And it is further agreed that jurisdiction shall be exercised by either government, as well over citizens or subjects of either party apprehended for violation of the regulations in any of its own waters to which said regulations apply, as over its own citizens or subjects found within its own jurisdiction who shall have violated said regulations within the waters of the other party.

Art. IV.—It is agreed that the waters within which the aforementioned regulations are to be applied shall be as follows: (1) The territorial waters of Passama-quoddy bay; (2) the St. John and St. Croix rivers; (3) Lake Memphremagog; (4) Lake Champlain; (5) the St. Lawrence river, where the said river constitutes the international boundary; (6) Lake Ontario; (7) the Niagara river; (8) Lake Erie; (9) the waters connecting Lake Erie and Lake Huron, including Lake St. Clair; (10) Lake Huron, excluding Georgian bay but including North Channel; (11) St. Mary's river and Lake Superior; (12) Rainy river and Rainy lake; (13) Lake of the Woods; (14) the Strait of San Juan de Fuca, those parts of Washington Sound, the Gulf of Georgia and Puget Sound, lying between the parallels of 48° 10′ and 49° 20′; (15) and such other contiguous waters as may be recommended by the International Fisheries Commission and approved by the two governments. It is agreed on the part of Great Britain that the Canadian government will protect by adequate regulations the food fishes frequenting the Fraser river.

The two governments engage to have prepared as soon as practicable, charts of the waters described in this article, with the international boundary line indicated thereon; and to establish such additional boundary monuments, buoys and marks as may be recommended by the commission.

Art. V.—The International Fisheries Commission shall continue in existence so long as this convention shall be in force, and each government shall have the power to fill, and shall fill from time to time, any vacancy which may occur in its representation on the commission. Each government shall pay its own commissioner, and any joint expenses shall be paid by the two governments in equal moieties.

Art. VI.—The regulations, restrictions and provisions provided for in this convention shall remain in force for a period of four years from the date of their executive promulgation, and thereafter until one year from the date when either the government of Great Britain or of the United States shall give notice to the other of its desire for their revision; and immediately upon such notice being given the commission shall

proceed to make a revision thereof, which revised regulations, if adopted and promulgated by the Governor General of Canada in Council and by the President of the United States, shall remain in force for another period of four years and thereafter until one year from the date when a further notice of revision is given as above provided in this article. It shall, however, be in the power of the two governments, by joint or concurrent action upon the recommendation of the commission, to make modifications at any time in the regulations.

Art. VII.—The present convention shall be duly ratified by His Britannic Majesty and by the President of the United States, by and with the advice and consent of the Senate thereof, and the ratifications shall be exchanged in Washington as soon as practicable.

In faith whereof, the respective plenipotentiaries have signed the present convention in duplicate, and have thereunto affixed their seals.

Done at Washington the 11th day of April, in the year of our Lord one thousand nine hundred and eight.

Under Article I. of the treaty, Professor Edward E. Prince, Dominion Commissioner of Fisheries, was appointed the Canadian commissioner, and Dr. David Starr Jordan, president of the Leland Stanford University, of Palo Alto, California, was appointed the United States commissioner.

These commissioners are now busily engaged in investigations, looking to the submission to both governments of recommendations as to the most suitable regulations for the various waters specified in Article 2 of the treaty.

### TRANSPORTATION OF FRESH FISH, 1908-9.

Though the Canadian fisheries are the most extensive in the world, Canadians living any considerable distance from the coast line, generally speaking, have not been large consumers of fish, and the fish business on the Atlantic coast line has practically been one in cured fish.

On the face of it, it may seem very strange why such a wholesome and nutritious article of food as fresh fish has not been a staple in the bill of fare of practically all households.

It must not be forgotten, however, that Canada is a country of magnificent distances, of comparatively a small and scattered population, with few large cities; that up to the present the Canadian Atlantic fishery has been practically confined to the summer season, when the shipping of fresh fish is beset with many difficulties, all of which conditions seriously militated against a development of a fresh fish business, and these conditions are, moreover, probably largely responsible for the fact that the more important centres of consumption, such as Montreal and Toronto, were drawing their supplies of fresh fish in a great measure from the United States, the nearness of such bases of supply as Portland, Gloucester and Boston, the cheap express rates involved and their reliability as to filling orders, making them convenient places to which to turn.

Appreciating that not only should this condition of things be stopped; but that there was room and opportunity for working up a large and constant trade in fresh fish in Canada, if it could be laid down on the interior markets cheaply and in first-class condition, in 1907 the whole matter was carefully inquired into with a view to taking steps that would best remedy such conditions, to which end an appropriation of \$25,000 was procured in parliament.

The greatest difficulty that seemed to confront the Canadian business was the transportation facilities. On account of the smallness and uncertainty of the shipments the railways did not find it a paying venture to place cold storage cars at the disposal of the shippers, leaving them no other resource than to forward by express, the rates by which the dealers claimed were too great to enable them to compete satisfactorily with United States bases of supply, notwithstanding the customs duty, although this duty has in recent years been raised from one-half to one per cent.

For instance: The express rate from Port Mulgrave—the shipping point for eastern Nova Scotia—or Halifax, to Montreal, is \$1.50 per 100 pounds, while from Portland or Boston it is but 80 cents. Add to this the duty of \$1 per 100 pounds, and we have a rate of \$1.50 from Nova Scotia, as against \$1.80 from the United States. As, however, shipments could be drawn so much more rapidly from the latter points, and dealers had a practical certainty of their orders being filled, and could, therefore, depend on receiving their supplies just when expected—which is an absolutely necessary condition in the fresh fish trade—Canadians found themselves unable to satisfactorily compete, and thus gain that foothold essential to a guarantee of a permanent supply, which would follow only when the producers would always be sure of a remunerative market for their freshly caught fish.

Following the inquiries above referred to, an arrangement was in September of 1907 entered into with the Intercolonial Railway by which, on Saturday of each week, a refrigerator car, for the transportation of fish, was attached to the fast freight train leaving Halifax, and on Monday of each week, another was to be attached to such train at Mulgrave, due to reach Montreal fifty-six hours from Halifax, a Saturday cold storage car from Mulgrave having previously been arranged for on an agreement between the shippers and the railway, the condition under which this service was undertaken being that this department undertook to guarantee the railway that these cars would, on each trip west, earn at least two-thirds the regular charge on a carload lot of twenty thousand pounds, from the point of starting to destination, plus the cost of icing, at minimum carload rates.

This arrangement was also entered into with the Halifax and Southwestern Railway, shipments over which would connect with the Intercolonial Railway at Halifax. It was not entered into with the Canadian Pacific Railway, the New Brunswick dealers feeling that the conditions there were not such as to call for it.

While it is true that this service was that year—1907—in operation only during the time when the trade in fresh fish would be lively, that it in a marked degree, stimulated the trade is clearly demonstrated by the fact that while hitherto, so far at least as Halifax is concerned, no such service was available at all, the responsibility of the

department proved merely nominal, and indeed on some trips there was nothing to pay at all.

There are, however, two great drawbacks with freight—slowness and uncertainty—which, even with the best of cold storage facilities, are fatal to its effectiveness in the satisfactory development of the fresh business. Though a freight train may reach its destination on time, it not infrequently happens that many hours elapse before a particular car can be shunted into an available position, and as consignments of fresh fish are usually ordered for the market on a particular day in the week, the loss of time above explained might readily place the dealer in the dual difficulty of being unable to fill orders arranged for, or to sell the fish consigned to him when intended, involving the necessity of incurring cold storage charges, and the carrying over of the consignment.

Realizing, therefore, that express facilities at a moderate charge could alone meet the difficulty, and as it did not appear possible to procure a reduction in the rates charged by the express companies, the department, in the spring of this year, entered into an agreement with the Intercolonial Railway by which a refrigerator car for the carriage of fresh fish would one day each week be attached to the Marine express, leaving Halifax and Port Mulgrave for Montreal, which car was placed at the disposal of the dealers at a rate of one dollar per one hundred pounds from Halifax, and one dollar and five cents per one hundred pounds from Port Mulgrave.

For some reason, however, this car was not availed of to an extent sufficient to warrant the expense of its continuance, and after a few trips the experiment was discontinued, and the fast freight arrangement inaugurated the previous year re-established.

Possibly the main drawbacks to the practical express facilities just explained were that the service was limited to one day each week and the consignments had to be taken charge of at the car, from which it would seem that nothing short of the ordinary general express service at suitable rates would achieve the end in view.

With the object, therefore, of exhausting all available means of stimulating the business by way of transportation facilities, an arrangement was in September last entered into with the express companies, by which they would charge two-thirds of the ordinary express rates on all shipments of fresh fish from the Canadian Atlantic coast to points in Quebec and Ontario, and collect the remaining one-third from this department, thus giving a rate of one dollar per one hundred pounds from Port Mulgrave, and Halifax to Montreal, and relatively from and to all other points. This arrangement was continued throughout September, October and November.

The results of this service were gratifying to a degree. In fact one shipper furnished the department with a statement of the sales made by him during the three months in question of 1907 and 1908, which showed five fold increase, and he claimed that this was largely due to the possibilities offered by the cheap express service, and the dealers were practically a unit in the view that a continuance of the service would not only result in a speedy development of the markets at present supplied, but of an

expansion of the business to more remote ones, and in fact during the three months in question considerable shipments were made from the Canadian Atlantic coast to Toronto, Hamilton, London, Ottawa, &c.

Not only this; but an examination of the customs returns seems to demonstrate beyond doubt that the importations from the United States are being replaced by Canadian fish.

As the fiscal year 1907 had but nine months, let us take for illustration the quantities of fresh fish imported into Canada from the United States during the fiscal years 1906 and 1908. In 1906 Ontario and Quebec imported 1,968,572 pounds of fresh sea fish, while in 1908, such importation fell off to 1,180,543 pounds.

Though the customs returns show considerable quantities imported into the maritime provinces, these are very largely made up of fish sold by the United States fishing vessels which for various causes find it necessary to put into the nearest port and dispose of their catches to avoid the loss of them. The duty is paid upon these when they go to swell the supply available for the Canadian markets.

As this service proved so satisfactory it was, on February 24 re-established for another season, and the fast freight service is also being maintained.

The trade in fresh fish from the Pacific coast is on an entirely different basis, and after the most thorough inquiry into the matter, it was not found that the same assistance could be given, or indeed was needed here. From the Atlantic, as has been shown, the trade is in small lots, thus coming under the maximum transportation rates, while the shipments from British Columbia to such eastern points as Toronto and Montreal, all proceed in carload lots, thus making it possible to obtain the most favourable transportation charges, and it is submitted that it is a question of the greatest doubt as to whether an industry which is operating under the most favourable charges can be permanently benefited by for a time relieving it of a portion of such charges, or even whether it would not find itself in a worse condition after such assistance were withdrawn than if such had never been given.

Under these conditions, and as a freight service for fresh fish from British Columbia, even by cold storage cars, is out of the question on account of the distance, it was not felt advisable to enter into any arrangement which would affect shipments coming in carload lots.

There is, however, a considerable trade from British Columbia to points in Alberta, Saskatchewan and Manitoba, which labours under the same disability, on account of the smallness of the shipments as obtains from the east. The express rate on carload lot shipments from British Columbia to Montreal, for instance, is three dollars per one hundred pounds, while that charged on less than a carload lot consignment is: to Calgary, three dollars and fifty cents per one hundred pounds, and to Edmonton, Qu'Appelle or Winnipeg, four dollars and fifty cents per one hundred pounds.

Such rates, it is urged, render it impossible to expand the business to any satisfactory extent, and a similar arrangement has, therefore, been applied to these ship-

ments as obtains in connection with those from the Atlantic, and in order to limit it to shipments which are only possible in less than carload lots, it confines the responsibility of this department to one-third of the ordinary express charges on fresh fish shipments from British Columbia to points in Alberta, Saskatchewan and Manitoba. It is trusted that the result will be a gratifying expansion in the fresh fish trade from British Columbia to these provinces, and the hastening on of the day when the necessity for assistance will be done away with by the fact that the shipments will have acquired carload lot proportions.

Thus it will be observed that the assisted service from the east proceeds as far west as the western boundary of Ontario, and that from the Pacific as far east as the eastern boundary of Manitoba.

The time has come when transportation facilities are so advanced that it should be possible to obtain fresh fish, in absolutely first class condition, and at reasonable prices in practically all parts of our country; but before the business can be suitably carried on, cold storage facilities must be available, not only around the coasts, but throughout the Dominion, and the fish displayed for sale to the consumer in well equipped stores.

#### STEAM TRAWLING.

The innovation of steam trawling off the Canadian shores has been introduced this season by an imported trawler named the *Wren*, which vessel was brought to this country by a Halifax company.

Immediately urgent representations were made to the department on behalf of the shore fishermen strongly remonstrating against the operations of the vessel, the objections advanced being that large quantities of small unmarketable fish were taken and wasted, and that she was destructive to the gear of the hand liners, as well as of the grounds resorted to by them for fishing purposes.

The question of the use of steam trawlers in Canada had more or less been engaging the attention of the department for some time past, and all persons contemplating such method of fishing have been told, when they communicated with the department on the subject, that while there were no actual restrictions at the time contained in the Fishery Regulations, it was altogether likely that the use of these fishing engines, if introduced into Canada, would be prohibited within the three-mile limit.

So serious were the complaints against steam trawling immediately following its introduction, that the department procured an order in council, dated September 9, 1908, a copy of which is quoted below:—

'His Excellency the Governor General in Council, in virtue of the provisions of section 54 of the Fisheries Act, chapter 45 of the Revised Statutes of Canada, 1906, is pleased to make, and doth hereby make the following Fishery Regulation:—

'The use or operation of vessels known as "steam trawlers" operating "beam," otter," or other trawls for the purpose of catching fish, is prohibited within the three-mile limit and in the bays and harbours of Canada.'

This was as far as the department could go under existing legislation.

Since that time, however, almost universal complaints have been received from fishermen's unions and others against the use of these fishing engines, and on the other hand the owners or operators of the Wren represented to the department that it was a hardship during the winter months when the weather is rough and stormy to compel them to operate outside the three-mile limit, while during the spring and summer no inconvenience or hardship is experienced, as there is plenty of ground in the open sea in which the trawl could be operated without interfering with the fishermen's nets or gear, and they asked that operations should be permitted inside the three-mile limit from December to April, inclusive, because of the development of new fisheries, such as plaice and soles, for which a good market could be found.

During recent years French fishermen have developed in the Gulf of St. Lawrence an increasing steam trawl fishery, operating from the Islands of St. Pierre and Miquelon, and during the year of 1908 no less than nine trawlers were operated, securing 977,000 fish in numbers, or 19,600 quintals. These vessels range from 105 to 173 tons.

This innovation met with considerable complaints in Newfoundland on the ground that the trawlers destroyed the gear of the hand trawlers.

The action of the department in procuring the order in council which prohibited this method of fishing within the three-mile limit, and the bays and harbours of Canada did away with any question of encroachment on the territorial waters.

There is a considerable diversity of opinion with regard to steam trawling, and it is a fact that wherever this innovation has been introduced strong complaints have been made against it by the shore fishermen, obviously because of its greater catching power as compared with less progressive methods, and the interference with their gear, and it is considered that the government in going the length of excluding the operation of this class of fishing engine from the bays and territorial jurisdiction has gone a long distance towards conserving the interests of the shore fishermen.

If by statute the government could control the operation of foreign steam trawling vessels beyond the three-mile limit, then it might be possible to procure some class of legislation by which its operation might be curtailed or prohibited if deemed expedient; but as previously shown there is a number of French steam trawlers operating on the Atlantic coast of Canada and the grand banks, with which under the existing legislation it would be impossible for the Canadian government to interfere, and the question is therefore complicated by its international character.

If eventually it be regarded as expedient to further restrict steam trawling, the only effective way of dealing with the matter would necessarily be by way of international negotiations, which would have to embrace at least the United States and French governments, as well as those of Canada and Great Britain, while doubtless it would be necessary to secure the adhesion of other foreign countries in the event of a prohibition of this method of fishing being deemed expedient by the governments in question.

Of course it might be possible to procure legislation prohibiting the landing of fish caught by steam trawlers; but obviously under existing conditions this would be an undue discrimination against Canadian trawlers in favour of those from foreign countries, which no Canadian legislation could reach, and this it would seem would be an even worse position than the conditions now complained of.

An interesting report by Mr. John J. Cowie, the Scotch herring curing expert, on the subject of trawling will be found at Appendix 20.

#### DOG-FISH REDUCTION WORKS.

In addition to the works at Canso, Nova Scotia, and Shippegan, New Brunswick, which have now been working for some seasons past, the last of the three originally decided upon as intimated in the report for 1904, was completed in November last.

The plant is located at Clarks Harbour, on a small island known as Mud island, which was kindly placed at the disposal of the department for this purpose by the Nova Scotia government.

The works are the most complete of the three, advantage having been taken of the experience gained in the operation of the other establishments, and an improved press and cooker were installed. It is anticipated that the three works will be in operation during the coming season.

During the past season 160<sup>3</sup>/<sub>4</sub> tons of fish scrap and 12,040 gallons of oil were produced at the Canso works, and 115 tons of scrap and 2,076 gallons of oil at the works at Shippegan.

#### THE SOURIS FISH DRIER.

Owing to the late date at which the usual parliamentary appropriation for this establishment was made available, it was not possible to commence active operations during the past season until towards the end of July.

During the past year rather unremunerative prices for fish prevailed, owing to an over-supplied market, Norway having made exceedingly heavy catches.

Two hundred and twenty thousand eight hundred and forty-four pounds of green, kenched and flaked fish were purchased at the drier, for which a total sum of \$2,213.21 was paid.

An apparatus for putting up boneless fish has been installed in the drier, and a considerable quantity of the fish purchased, after being cured, had the bones extracted, and were placed on the market in small packages. For these fish there appears to be a large local demand, and practically the whole output thereof was sold to Prince Edward Island merchants.

The dried fish, as in past years, were sent to widely different markets, such as the West Indies, Liverpool, Eng., New York and Brazil, besides the local ones, and

while up to the end of the fiscal year \$1,097 were received on account of sales, shipments have been sent out which will be accounted for during the next few months, which would yield \$1,750, and if it had been possible to have begun operations at the opening of the past season and thus been in a position to take advantage of what was probably the best end of the fishing season, there is every evidence that the drier would have been a source of a highly satisfactory revenue.

It may be here emphasized that it is not possible to get a complete or adequate knowledge of the results of the operations of the drier from the financial report of any one fiscal year, as though all the expenses therefor will be set forth, it has not been found expedient to place on the markets all the fish bought before the end of the fiscal year, or even is it possible to obtain returns for all shipments made by that time.

The object the department had in view in establishing the drier was, as pointed out in previous reports, to demonstrate to the fishermen and dealers the advantages of mechanical fish drying over the ordinary sun and air methods.

Though two of the three years that the drier has been in operation have been ones in which the market conditions generally have not been satisfactory to the dealers, it is submitted that the drier has achieved the end in view.

The products of the establishment have been most favourably commented on in widely different parts of the world, and so well impressed was a large Brazil dealer—which market is considered to be one of the most fastidious—that he expressed himself as ready to handle the total output of the drier.

It is, of course, by no means the desire of the department to enter the commercial arena, and compete with business interests, and its only reason for temporarily doing so was to make the object lesson the department wished to give, sufficiently comprehensive to be successful. Had it been found possible to do this by contracting with the fishermen and dealers to dry their fish for them at reasonable rates, and let them attend to the marketing of them, it would have been much preferable, but this was not found to be practical, though the drier has always been at the disposal of any of the fishermen or fish dealers to have their fish dried, and has been taken advantage of in such connection to a limited extent.

As, however, it is now felt that the object in establishing the drier has been accomplished, and as it is not desirable to continue operating it as a government institution any longer than is necessary, the department has in view its disposal by leasing it to some fish firm, and to such end it is now in correspondence with the different dealers in cured fish on the Canadian Atlantic sea-board.

#### MARINE BIOLOGICAL STATION.

The two marine biological stations and the Great Lakes' station may be said to have during the past year had an unusually successful season, both in regard to the number of able workers from the various Canadian universities, and the amount of work actually accomplished.

The Atlantic station, at St. Andrews, New Brunswick, now possesses splendidly equipped laboratory buildings, board and mess rooms for the staff, and every appliance necessary for fishery and marine biological researches. The site is a sheltered and convenient one just below the mouth of the St. Croix river, and facing one of the richest grounds from a zoological point of view, in the prolific waters of Passama-quoddy bay. A special private road, with the sanction of the Canadian Pacific Railway Company, has been built leading from the main St. Andrews road to the picturesque lands of the station. The United States Commissioner of Fisheries, Mr. George M. Bowers, who visited the station during last summer, expressed the highest opinion of its capabilities and its equipment, and his highly favourable views were shared by President David Starr Jordan, Leland Stanford University, who with Dr. Barton Evermann, and other distinguished biologists, visited the station.

With the aid of the station's steam vessel, the gasoline launch and various boats, forming the station's appliances, extensive faunistic researches were carried on.

Professor D. P. Penhallow was the resident director and did a large amount of onerous work in the operations of the season. Professor A. B. Macallum, Toronto; Professor Playfair McMurrich, Toronto; Professor A. P. Knight, Queen's University, Kingston; Professor McBride, McGill University; and Dr. Joseph Stafford, McGill University, Montreal, were the principal senior workers; but an able staff of junior assistants, from Toronto University and other institutions, also took part in the season's successful investigations. Studies on the oyster fisheries, the marking of migratory fishes, and various zoological and botanical studies completed a varied programme of work.

The Pacific Biological station at Departure bay, near Nanaimo, British Columbia, is now almost completely fitted with the appliances for marine researches, and under the skilled superintendence of the Reverend George W. Taylor has had a most successful first season. The situation of the station is perfect, and is within a few yards of one of the richest marine zoological areas known, where rarities of surpassing scientific interest abound. The laboratories of the station are large, bright, airy rooms, and chemical rooms, library room, mess room, and dormitory for the staff, afford ample accommodation. A small steamboat, launches for dredging, &c., are needed, also microscopes, and a reference library.

The workers included Mr. Taylor, the curator, Professor John Macoun, Professor Burwash, Mr. C. H. Young, Dr. Huntsman, Mr. A. Halkett, Mr. McLean Fraser, Mr. Spreadborough and others.

Fine collections of specimens were made and valuable fishery and other work done.

The Georgian Bay biological station under Dr. B. Arthur Bensley, has continued the studies which have been recorded in previous seasons, and the observations on the spawning, food, and habits of certain of the more important food fishes, in the Great Lakes, are now so far completed as to allow of their publication at an early date. A small staff of workers, chiefly from Toronto University, resided at the station, and the museum of specimens was greatly augumented.

A number of practical problems, which the Dominion (Georgian Bay) Fishery Commission desired to be solved, formed part of the programme of work, and it may be added that Dr. Bensley was asked for expert evidence, based on the laboratory fishery researches, and this evidence was laid before the commission at the public sittings.

#### RUSSIAN SEIZURES OF CANADIAN FISHING VESSELS, 1892.

This long standing and irritating question which has formed the subject of diplomatic correspondence between Russia, Great Britain and Canada for the past seventeen years is at last settled by the payment by Russia of the claims in respect of the sealing schooners Carmelite and Vancouver Belle.

To afford an understanding of this question a slight retrospective outline of the history may be of interest.

The controversy with the Russian government grew out of the Behring Sea question, although it has been kept as separate and distinct as possible from that main question.

The Behring Sea question proper began in 1886, by the overt acts of the United States officials in seizing and otherwise interfering with the operations of the British sealing vessels in that portion of the Behring sea lying eastward of the American side of the line laid down in the Treaty of Cession, 1867, between Russia and the United States.

The portion of Behring sea lying on the Asiatic side of that line, is what is generally called Russian waters, and with the contiguous waters of the North Pacific ocean outside of that sea, forms the field for the interferences by Russia, with British sealers, although the principal causes of complaint against the Russian authorities have originated in the main North Pacific ocean, south of the Komandorski islands, which form the southern boundary of the Russian or Asiatic portion of Behring sea.

The difficulties in connection with the Behring Sea question formed the subject of very lengthy negotiations and much diplomatic correspondence between Her Majesty's government and that of the United States.

While this correspondence was dragging on towards an agreement for the reference of the question to arbitration, propositions were made by the United States government to that of Her Majesty for the establishment of a modus vivendi in the American portion of Behring sea, by which the vessels of both nations would be excluded therefrom during the pendency of the arbitration.

The negotiations resulted in such an agreement, and for the first time, in 1891, British sealers were prohibited from entering those waters—that is, the eastern half of Behring sea—for the purpose of plying their calling.

This agreement was reached somewhat late in the season, and therefore had the effect of only partially excluding the sealers from those waters during that year.

Negotiations having failed to reach the point of arbitration by the beginning of the sealing season of 1892, Her Majesty's government agreed to continue for that year the *modus vivendi*.

Thus, the Canadian sealers, forced out of their usual hunting grounds by these diplomatic arrangements, and having that year reached the Aleutian passes to the prohibited waters of Behring sea, through which the seal herd, that they had followed up the coast, had just entered, found themselves many hundred miles from home in remote waters, with the alternative of returning to Victoria, thus abandoning their sealing voyage, or seeking other regions, where they might carry on their operations untrammelled by such arrangements.

Many of them, therefore, sought the Asiatic waters in the vicinity of the Japanese coast, and the Komandorski islands of Russia, which, though not wholly hitherto unknown to them, they exploited with more or less success.

It was thus that the more particular attention of the Canadian pelagic sealers was attracted to the possibilities of the industry in Asiatic waters.

These initial operations met with a disastrous rebuff from the Russian authorities, for in that year, 1892, the following seizures and interferences occurred:—

Schooner Willie McGowan seized.

- " Ariel seized.
- " Rosie Olsen seized.
- " Carmolite seized.
- " Maria seized.
- " Vancouver Belle seized.
- " W. P. Hall ordered off.
- " C. H. Tupper ordered off.

Prompt representations followed, and diplomatic correspondence ensued, during which formulated claims were submitted on behalf of the owners of the respective vessels.

The Russian government submitted the question of the seizures to a special commission of its own appointment. The decision of this commission, which, of course, was entirely a Russian one, found that with the exception of the Willie McGowan and the Ariel the seizures were regular and could be maintained.

Having admitted liability in respect of these two vessels, Russia made due recompense, which has been received by Canada and paid over to the claimants.

They, however, repudiated the other claims on the grounds that the seizures were maintainable, while the claims of the *Tupper* and *Hall* being wholly prospective, could not be considered. Neither Canada nor Great Britain ever admitted this view and after protracted diplomatic correspondence, Russia finally agreed to submit the remaining claims to arbitration.

Negotiations then began for an agreement upon the terms of reference to the arbitrator and continued for a period of about three years, without result, the Russian

negotiators seeking to impose the introduction of extraneous agreements and conditions which appeared to be necessarily fatal to the claims, and as they absolutely refused to recede from that attitude or to accept any modification, the negotiations for arbitration fell through.

It was finally arranged, however, that the matter again be taken up diplomatically, and it was eventually agreed between the two governments that the question should form the subject of a conference between Russian and Canadian delegates, with a view to finally settling this long standing question.

This conference was held in London in March, 1904, and after a full discussion of each of the vessel's claims, resulted in a subsequent offer by the Russian government to close the whole matter by an adjustment of the claims in respect of the schooners Vancouver Belle and Carmolite, on the relinquishment of those of the other vessels.

After a careful consideration of the conflicting contentions and the evidence in the shape of protocols, log entries and statements of Russian naval officers and other officials, with which the Russian authorities could support their position before an arbitrator, against which Canada necessarily had but the affidavits and declarations of the sealers themselves upon which to rely, the Canadian delegate was forced to the conclusion that the offered settlement was the best that could be expected, under the circumstances before any fair arbitrator, while he could not lose sight of the certainty of further lengthy delay and the possibility of failing to recover anything.

Added to this was the consideration that it was abundantly clear from the negotiations that failing a settlement as the result of the London conference, it would practically be impossible to induce Russia to acquiesce in any further negotiations in connection with the 1892 seizures.

The government eventually accepted Russia's offer and that government accordingly paid through His Majesty's government the awards, as follows:—

Vancouver	Belle	 	* *	 		 	 \$16,846 4	0
Carmolite.		 		 	 	 	35 403 4	4

In each case these sums include interest on the claims for fourteen years at the rate of six per cent.

The award in respect of the *Carmolite* was paid over to the proved owners of the vessel after arranging for the satisfaction of a claim against the same, and that of the *Vancouver Belle*, was paid into the hands of the agent of the Department of Justice at Vancouver and the Vancouver Ship Building, Sealing and Trading Company (Limited), the owners of the vessel, jointly, for adjustment.

Thus this international incident with Russia is retired from the field of dip-lomacy.

### GENERAL STATEMENT RE FISHERIES.

#### EXTENT OF FISHERIES.

To say that the fisheries of Canada are, by far, the most extensive in the world is no exaggeration, moreover it is safe to say that the waters in and around Canada contain the principal commercial food fishes in greater abundance than the waters of any other part of the world. The supreme fertility of what may be called our own waters is abundantly proved by the fact that, apart from salmon, all the lobsters, herring, mackerel, and sardines, nearly all the haddock, and many of the cod, hake and pollock landed in Canada are taken from within our territorial waters.

The proportion of our inshore fishermen to deep-sea fishermen is as 8 of the former to 1 of the latter. Further proof may be found in the operations of the steam trawler Wren during the year 1908. The work of the trawler was carried on outside the territorial limit, yet within easy distance of the shore. Half an hour's dragging by the Wren in any part of the waters off our coast, brought up more fish than a British trawler can secure in a six hour's drag in any part of the famed North Sea fishing grounds, and further, in a report submitted by Mr. Dannevig, Director of Fisheries, Australia, on the operations of the Commonwealth trawler Endeavour it is stated that the best catch secured by that boat, was one and a half tons in one drag, off Cape Barren near the coast of Tasmania. This is only about half the quantity secured by the Wren in any one of her drags during her season's operations in Canadian waters, either on the Atlantic banks, or in the Gulf of St. Lawrence.

The coast line of the Atlantic provinces, from the Bay of Fundy to the Straits of Belle Isle, without taking into account the lesser bays and indentions, measures over 5,000 miles, and along this stretch are to be found innumerable natural harbours and coves.

On the Pacific coast, the province of British Columbia, owing to its immense number of islands, bays and fiords which form safe and easily accessible harbours, has a sea-washed shore of 7,000 miles. Along this shore and within the limits of the territorial waters, we have fish and mammals in greater abundance, probably, than can be found anywhere else. Our sea coast line is thus more than double that of Great Britain and Ireland. Apart from this immense salt water fishing area, we have in our numerous lakes no less than 220,000 square miles of fresh water, abundantly stocked with many excellent species of food fishes.

It may be pointed out that the area of the distinctly Canadian waters, of what are known as the great lakes—Superior, Huron, Erie and Ontario—forms only one-fifth part of the total area of the larger fresh water lakes of Canada.

The fisheries of the Atlantic coast may be divided into two distinct divisions; the deep-sea, and the inshore or coastal fisheries.

The deep-sea fishery is pursued invessels of from 40 to 100 tons, carrying crews of from 12 to 20 men. The fishing grounds worked on are the several banks which 22—p

lie from 15 to 80 miles off the Canadian coast. The style of fishing is that of trawling by hook and line. The bait used is chiefly herring, squid and capelin; and the fish caught are principally cod, haddock, halibut, hake and pollock. The round fish are split and salted at sea for drying purposes.

The inshore or costal fishery is carried on in small boats with crews of from 2 to 3 men, also in the small class of vessels with crews of from 4 to 7 men. The means of capture used by boat fishermen, are hooks and lines, gill nets, and from shore are operated trap nets, haul seines, and weirs. The commercial food fishes taken inshore are the cod, hake, haddock, pollock, halibut, herring, mackered, alewife, smelt, flounder and sardine.

It will be observed by readers of this report in the British Islands, that there are no ling, nor whiting in Canadian waters; neither are there any turbot, brill, soles, nor plaice.

The latter kinds are only to got, of course, by trawling, chiefly, but the operations of the steam trawler *Wren* have failed, so far, to reveal the presence of those valuable flat fishes in our waters.

The halibut fishery of British Columbia is carried on from close inshore to almost any distance off the northern part of the province, chiefly, in steamers and vessels. The means of capture is trawl lining, dories being used for setting and hauling the lines as in the Atlantic deep-sea fishery.

The means of capture in use in the inland lake fisheries are gill nets, pound nets, and seines, and, of course, hook and line to a great extent. The principal commercial fishes caught are, whitefish, trout, pickerel, pike, sturgeon, and fresh water herring—the latter in the great lakes of Ontario only.

#### VALUE OF FISHERIES.

The whole catch of fish in our waters by Canadian fishermen, including fish products, seals, &c., during the year 1908, is valued at \$25,451,085.

This is a drop of \$48,264 from the total of 1907, and \$828,400 behind that of 1906. The year 1906, however, is the second highest on record—1905 being the record year—the results of that year being from two and a quarter to four and a quarter millions of dollars, ahead of the years 1902-3-4; so it will be seen that although the total for 1908 is less than the two preceding years the upward tendency is fully maintained.

The results for 1908 were obtained by a fishing fleet of 1,414 vessels—9 of which were engaged in hunting fur seals—and 39,965 boats, the whole manned by 71,070 men. The extensive use of gasoline engines in boats, as a means of propulsion, is enabling our boat fishermen to prosecute the inshore fishery with increased vigour.

The following table shows the total value of the fisheries of each province in their respective order of rank with the increase or decrease as compared with the year 1907:—

Provinces.	Value of Fish.	Increase.	Decrease.
	\$	\$	\$
Nova Scotia. British Columbia. New Brunswick Ontario Quebec Prince Edward Island Manitoba and Keewatin Saskatchewan Alberta Yukon Territory	600,396 152,795 58,955	377,508 342,115 165,053 50,305 49,246	165,573 114,071
Totals	25,451,085	984,227	1,032,491
Net decrease			48,264

<sup>\*</sup> No figures hitherto given seperately for Yukon, consequently total value for 1908, is shown as an increase.

Statement showing the relative values of the principal commercial fishes above \$100,000 in their order of rank for the year 1908, and showing increase or decrease as compared with the year 1907:—

Kinds of Fish.	Value.	Increase.	Decrease.
	\$	\$	\$
Salmon. Lobsters Cod. Herring Mackerel. Halibut Whitefish Haddock Sardines Trout Pickerel Hake Smelts. Pollock Clams, quahaugs, &c Pike. Oysters	4,814,250 4,200,279 3,361,409 2,471,963 1,336,810 1,045,316 819,626 716,800 674,808 666,322 562,076 496,668 479,523 338,013 313,131 285,187 265,080 120,506	116,157 398,207 355,304 203,929 131,160 9,211	200,196 258,409 82,430 10,570 84,413 72,325 296,343 75,152 145,649 9,551 10,845
Alewives. Eels	108,001		8,477

It will be observed in the foregoing that the value of lobsters has increased by \$116,157.

The values of herring, mackerel, halibut and whitefish have also risen considerably over those of 1907, while salmon, cod, smelts and clams—chiefly quahaugs—each show a considerable falling off in value as compared with the previous year.

It is worthy of note that British Columbia contributes no less than four-fifths of the total value of halibut landed in Canada during the year.

Sturgeon was included in the foregoing table last year, but the value of this fish for 1908 falls below the \$100,000 standard and is therefore ruled out.

From the year 1869 to 1908 inclusive, the five principal commercial sea-fishes have yielded the following values:—

Cod	 	\$146,495,980
Salmon	 	106,618,615
Lobsters	 	91,575,954
Herring	 	79,815,884
Mackerel	 	49,735,288

# RECAPITULATION.

OF the Yield and Value of the Fisheries of the Dominion of Canada for the Year 1908.

ramper.	Kinds of Fish.	Quantity.	Value.	Total Value.
_				\$
1 2 3	Cod, dried Cwt.  If fresh or green Lb. It tongues and sounds Brls.	700,530 5,432,100 1,710	3,152,382 191,927 17,100	
		87,246	261,738	3,361,409
4 5 6	Haddock, dried	8,553,704 3,291,915	256,608 198,474	716,800
78	Hake, dried Lb.	184,064 123,873	460,603 36,065	496,668
9	Pollock, dried	113,201		338,013
0	Tom Cod or frost fish. Lb. Halibut. "	2,310,791 19,214,013		69,322 1,045,316
$\frac{1}{2}$	Flounders"	1,260,414		38, 41
3	Salmon, preserved in cans	27,188,889	3,485,320 736,114	
4	fresh	7,062,563 $457,166$	47,731	
6	pickled or dry salted	10,084,400	545,085	4.014.05
_	m ( ( 11 1 ' 1 )	7,211,246		4,814,250 666,325
7.8	Trout, (all kinds)	40,000		4,00
9	Whitefish	10,358,734	**** *****	819,620
0	Smelts "	7,501,905 625,200		479,523 31,85
1 2 2	Oulachons "Herring, salted Brls.	311,246	1,409,911	01,00
23	fresh	62,633,902	921,241	
4	smoked and kippered ""	5,162,422	140,811	2,471,96
5	Sardines, preserved in cans	4,899,000		244,95
26	fresh or salted Bris.			429,85
27	Shad	4,391		45,32 120,50
28 29	Alewives "B.			285,18
30	Maskinongé Brls.	3,510		35
31	Eals salted	8,051 458,195		80,51 27,49
32	" fresh Lb. Perch "			49,73
34	Pickerel	6,298,011		502,07
35	Bass (achigan)	243,600 6,700		24,93
36 37	" (sea B.)  Mackerel, salted  Brls.	66,318	994,770	23,00
38	n fresh Lb.	2,850,340	342,040	1,336,81
39	Sturgeon	592,648	60,685	1,000,0.0
40	caviare and bladders	23,537	23,256	83,94
	Lobsters, preserved, in cans	10,911,497	3,273,447	00,94
$\frac{41}{42}$	fresh or alive	98,373		4 000 0
24		95 A97		4,200,27 $205,08$
43	Oysters Brls. Clams, quahaugs, scallops, &c.	35,027 689,507		313,33
44 45	Sanid	22,952		91,80
16	Coarse and mixed fish	17,528,032 4,954	108,988	473,08
47	Fur seal skins in B. C. No. Hair seal skins.	38,992	1	
$\frac{48}{49}$	Son often skins	33	10,895	
50	Beluga skins	146	584	165,67
		330,682		496,02
$\frac{51}{52}$	fortilizer	478,655		243,78
$\frac{52}{53}$	Figh oil Galls.	794,289		252,18
54	Whale modust	1 100 585		357,50 48,24
55 56	Tullibee, carp and greyling Lb. Dulse, cockles and other shell fish, not mentioned above. "	259,000		18,86
00				95.451.00
	Total value for 1908			25,451,08

### RESUME OF THE FISHERIES OF EACH PROVINCE.

### NOVA SCOTIA.

This province still keeps its place at the head of the list of fish-producing provinces of the Dominion, with an aggregate value of \$8,009,838.

Certain kinds of fish show large increases while others give considerable decreases in value.

The kinds contributing to the increased value are chiefly mackerel with \$500,000 and herring with almost \$130,000 more than in 1907.

A noticeable feature of the summer mackerel fishery of the year under review was the enormous congregation of these fish in Chedabucto bay.

In fact the big rush to the eastward seems to have completely ended here; for, almost the whole increased value of mackerel in Nova Scotia was produced in this bay, Guysborough county, on the one side of the bay, returns an increase in mackerel value of over \$240,000, and Richmond county, on the other side, an increase of nearly \$230,000. The county of Cape Breton, a little further to the east, profited only to a very small extent by the big mackerel school, while further still to the eastward the county of Victoria shows a derease in its mackerel returns.

The falling off in the mackerel fishery of Prince Edward Island and the gulf side of Cape Breton Island indicates that the great Atlantic school did not penetrate into the waters of the gulf in any great numbers during 1908.

There is an increase of \$102,000 in the value of lobsters over the whole province.

Halibut, eels, squid, and clams, also show increased values of \$48,000, \$20,000, \$67,000 and \$10,000 respectively.

The principal classes showing decreases are cod, with a shortage of \$230,000—mostly owing to the lower price paid per cwt. in 1908—and haddock, hake and pollock with \$87,000, \$60,000 and \$74,000 lower values respectively, also owing to reduced prices per cwt.

The balance of increase and decrease of all kinds for the whole province, however, shows that the total for 1908 is greater than that of 1907 by \$377,508.

There were 40 more men employed in vessels and 938 more in boats, throughout the province than during the previous year.

### District No. 1.

Looking into the figures of the various districts in the province, it will be found that in district No. 1 (Cape Breton) mackerel gives an increase in value of over \$260,000, and herring an increase of \$44,000; lobsters are \$10,000 and squid about \$40,000 ahead of the previous year. Eels and clams have also risen in value by \$8,000 each. The total increase for the district is \$242,420.

In coming down to the different counties of this district, it is noted that: Richmond county returns increased values in mackerel \$230,000; herring, \$60,000; lobsters, \$13,000 and squid and clams about \$20,000 and \$8,000 respectively. The catch of cod in the county was greater than that of 1907 but the value is less by about \$1,000. The value of haddock fell by about \$8,000 and hake, \$2,000. There is a total increase in the county of \$335,193, over the preceding year.

Cape Breton county shows increases in the value of mackerel and lobsters of about \$14,000 each, and halibut about \$2,000. The value of cod has fallen by \$50,000, while herring returns a value of \$15,000 less than in the previous year. There is a total decrease over the country of \$40,488.

In Victoria county the value of cod has risen by about \$7,000. Pollock and squid also show greater values by about \$1,000 each. The value of mackerel and lobsters has fallen by \$4,000 each.

There is a total increase of value in the county of \$3,542.

Inverness county gives an increase of \$26,000 in the value of mackerel, chiefly from the Strait of Canso ports. Lobsters have increased in value by \$10,000. There is an increase in the value of haddock of \$13,000—largely due to the operations of the steam trawler *Wren* at Hawkesbury.

Squid also shows \$18,000 more than in 1907. The value of cod has fallen by \$80,000 and herring likewise by \$5,000. There is a total decrease in the county of \$55,826.

### District No. 2.

This district comprises the counties of Halifax, Guysborough, Antigonish, Pictou, Cumberland, Colchester and Hants. It will be observed in looking at the returns, that the district shows a rise in the value of mackerel and herring, by over \$240,000 and \$40,000, respectively.

The total value of lobsters in the district shows neither increase nor decrease, because, while the value of lobsters canned has increased by \$58,000, the value of lobsters shipped fresh in the shell has decreased by the same amount. Clams and oysters give increased values of \$9,000 and \$1,000 respectively. The value of halibut has risen by \$11,000.

Cod and pollock show a decrease of \$40,000 each. The value of fresh haddock has fallen by \$57,000; but this decrease is counterbalanced to a great extent by an increase of \$20,000 in the value of haddock smoked and dried. The value of smelts and salmon has been lowered by \$10,000 and \$6,000 respectively. The balance of increases and decreases shows that the total value for 1908 is \$206,135 greater than that of the previous year.

A perusal of the figures by countries in this district shows that in Halifax county there is an increase, in the value of lobsters canned of \$12,000, but a decrease in the value of those shipped in the shell of over \$50,000. The values of hake, halibut and

herring have risen in this country by \$6,000, \$3,000 and \$4,000 in the order named. Clams also return \$10,000 more than in 1907. The total value of all kinds in the county is less than that of the previous year by \$1,565.

Turning to the figures for the county of Guysborough, the most striking feature there, is the increase of over \$240,000 in the value of mackerel. The value of cod has fallen by \$26,000. Fresh haddock value has likewise dropped by over \$50,000, while that of smoked haddock has gone up by \$10,000. Canso alone accounts for a decrease of over two million pounds of fresh haddock, although showing at the same time an increase of about 150,000 pounds in the quantity smoked and preserved in cans.

The value of pollock in the county is lowered by \$37,000, while halibut has risen in value by \$9,000. Squid returns an increased value of \$24,000. Altogether the county shows an increase in value of \$157,381 over the previous year.

The only noticeable fluctuation in Antigonish county is the shortage of nearly \$4,000 in the value of lobsters. There is a total decrease in the county, however, of only \$800, in the various kinds of fish.

Pictou county shows quite a substantial increase over 1907, due mainly to lobsters, the value of which has gone up by \$30,000. There are also increases in the value of salmon (\$3,000) and herring (\$2,000). The total value of all kinds in the county has risen by \$26,939 over the previous year.

Cumberland county shows an increase of nearly \$9,000 in lobster value, and about \$1,000 in oysters, while the value of shad has dropped by \$2,000. There is an increase in the total value of all kinds within the county of \$21,994.

In Colchester county the only feature worthy of note is a greater value in lobsters of over \$4,000. The total value of all kinds is greater than that of the previous year by \$3,195.

There is a decrease of \$1,010 in the total value of all kinds in Hants county, but there is no outstanding feature in the returns for 1908.

### District No. 3.

An examination of the figures for this district, which comprises the counties of Lunenburg, Queens, Shelburne, Yarmouth, Digby, Annapolis and Kings, shows the most prominent features to be increases in the value of lobsters of over \$90,000; halibut, \$35,000; and mackerel, \$21,000; and decreases in the value of salmon \$50,000; of herring, \$35,000; of cod, \$50,000; of haddock, \$35,000; of hake, \$55,000; and of pollock, \$32,000. The big falling off in value of the four latter kinds is due almost entirely to the lower price paid per cwt. during 1908. The total value of all kinds in the district is less than that of the previous year by \$71,047. In studying the figures of the various counties of the district it will be found the county of Lunenburg, which is the chief seat of the deep-sea cod fishery of Canada, shows increased values of over \$36,000 in cod; and nearly \$26,000 in haddock notwithstanding reduced prices.

There is also a rise in the value of halibut of over \$12,000. On the other hand mackerel will be found to have fallen in value by about \$19,000, and lobsters shipped fresh in the shell by about \$10,000. The total value of all kinds has risen by \$47,314.

Thirty-six more men were employed in boats and seven fewer in vessels than during 1907, in the county.

On turning to Queens county, it will be observed that the value of lobsters canned has increased by more than \$27,000, while the value of those shipped fresh in the shell has dropped \$13,000.

The mackerel value is greater than that of the previous year by over \$12,000, and the value of herring has also advanced \$7,000.

Cod, haddock and pollock, however, have diminished in value to the extent of \$29,000, \$14,000 and \$6,000 respectively. Other kinds, such as halibut, trout and alewives show a falling off of only a few hundred dollars each.

The total value of all kinds in the country is less by \$35,115 than that of 1907.

There were 11 fewer men employed in vessels in the county, and 35 more men in boats than during the previous year.

In Shelburne county there is a large increase in the value of lobsters shipped fresh in the shell of \$130,000; at the same time, there is a falling off in the value of lobsters canned of over \$20,000. The value of salted herring shows an advance of over \$48,000. The cod value has also advanced by nearly \$36,000 and halibut by over \$18,000. The value of fresh haddock has gone down by \$21,000, but that of dried haddock is greater by over \$22,000.

Mackerel value has fallen by about \$4,000.

The total value of all kinds in the county has increased by \$204,829.

There were 42 fewer men employed in vessels and 184 more men in boats than during the previous year.

In Yarmouth county the greatest fluctuations to be noted are the decreases in the values of lobsters canned, and cod; the former has gone behind that of 1907 by over \$27,000, and the latter by about \$35,000.

Haddock and pollock values have also dropped by about \$10,000 each. Halibut value shows an advance of \$2,000. The total of all kinds is less than that of 1907 by \$58,162.

There were nine more men employed in vessels and five more in boats.

In the county of Digby there is a falling off in the value of cod of over \$75,000, and in that of fresh and dried haddock a decrease of about \$50,000. There is an increase in the value of smoked haddock, however, of over \$25,000.

The value of hake has also fallen behind that of 1907 by over \$62,000, and of pollock by over \$23,000. Minor decreases to be noted are mackerel, over \$2,000, and clams, \$8,000.

Lobsters have advanced in value by about \$7,000, and herring and halibut likewise by about \$4,000 and \$2,000 respectively.

The total value of all kinds in the county falls below that of the previous year by \$181,092. There were 58 fewer men employed in vessels and 102 more men in boats than during 1907.

Annapolis county returns enhanced values in cod and hake of \$10,000, while the value of haddock has fallen by \$6,000.

Lobsters, salmon and herring have each gone down in value by about \$5,000.

The total value for the county of all kinds is greater than that of the preceding year by \$15,817. There were 10 more men employed in boats. In Kings county there is a heavy decrease in the value of salmon of over \$45,000.

Herring value also has declined by \$10,000; mackerel, pollock and shad have also dropped slightly in value, while the value of alewives has gone up about \$5,000. All kinds in the county show a total of \$64,638 less than the total of the previous year. Twenty-nine fewer men were employed in boats, and one man less in vessels.

Fuller details of the fisheries of Nova Scotia will be found at Appendix 3 of this report.

### NEW BRUNSWICK.

As will be observed there is a shortage in the value of the fisheries of this province of no less than \$546,266. This is due, to a great extent, to the poor results of the smelt fishing in No. 2 district, which alone accounts for more than half the total decrease. Other kinds showing considerable decreases are salmon, \$93,000; herring, \$92,000; clams, quahaugs, &c., \$80,000; lobsters, nearly \$26,000; cod, \$16,000; hake and shad about \$8,000 each; while the value of haddock has advanced by \$8,000 and of sardines, \$10,000.

The decreased value is not altogether owing to scarcity of fish, but rather to the poor condition of the markets for certain kinds.

There were 120 more men employed in vessels and 1,161 more men in boats than during the preceding year.

In looking at the figures giving sea fish values in districts 1 and 2, and comparing them with the figures for the previous year, it will be noticed that in district No. 1, which comprises the counties of St. John and Charlotte, salmon shows a decreased value of about \$19,000 and herring the considerable decrease of \$78,000. The drop in value of the latter is chiefly in smoked herring.

The value of lobsters and alewives has fallen short of the previous year, the former by \$20,000 and the latter by \$15,000. Hake too has fallen in value by \$8,000, but this is due to the price of sounds being returned at only half the price shown the previous year. Clams also show a decrease in value of \$59,000. A small increase

is to be noted in the value of cod. Haddock and smelt values also show increases: the former, \$8,000, and the latter, \$4,000; while sardines give an increased value of \$10,000. The value of sardines canned shows a decrease, however—the increase being due to the quantity used fresh and salted for bait. The value of dulse taken from the rocks in this district has increased by \$5,000.

The sardine fishery, the principal seat of which is in this district, was considerably retarded during 1908, owing to the dispute between the Bay of Fundy fishermen and the sardine canners as to the price of sardine herring. This dispute also affected the clam fishery in the district, as many of the American sardine canners turned to canning calms, thereby overloading the market and reducing values.

### District No. 2.

On turning to the figures for this district which comprises the counties of Albert, Westmoreland, Kent, Northumberland, Gloucester and Restigouche, the main features to be noted are the very large decreases in the value of smelts, \$29,000, and of salmon, \$79,000. The value of herring salted has also fallen below that of the previous year by \$14,000. Cod have fallen in value \$19,000. The quantity of cod landed was greater than in the previous year but the fall in price reduced the total value.

The value of clams has dropped \$15,000 and that of shad about \$3,000. The value of oysters in this district has advanced by about \$22,000.

Fuller details of the fisheries of New Brunswick will be found at Appendix 4 of this report.

### PRINCE EDWARD ISLAND.

The total value of the fisheries of this province for 1908 is \$114,071 less than that for the preceding year.

The chief contributors to this decrease are quahaugs with a lowered value of over \$70,000. Herring and mackerel each show a fall in value of \$50,000. The value of smelts has also fallen short by \$13,000.

Oysters and hake also show decreased values—the former, \$9,000, and the latter, \$3,000:

The quantity of oysters taken is greater than in 1907, but the price per barrel is shown in the returns as \$2 less. It is satisfactory, however, to be able to show an advance in the value of two important kinds, namely: lobsters and cod. The value of the former has increased by about \$77,000 and of the latter, notwithstanding the lower price per cwt., by \$20,000, the quantity landed in 1908 being much larger than in the previous year.

There were 22 fewer men employed in vessels and 33 fewer men in boats than during the year 1907.

A report by the inspector, and fuller details of the fisheries of the province will be found at Appendix 5 of this report.

### QUEBEC.

The returns for the whole of Quebec show a decrease of \$165,573 in the value of all kinds of fish landed.

What is known as the gulf division, which comprises the north side of the Bay Chaleur, from the Restigouche to Gaspé Basin, and along the north coast of Gaspé county as far as Cape Chatte, also the north shore of the lower St. Lawrence river from Saguenay to the boundary line between Quebec and Labrador, and all the Magdalen islands, accounts for \$142,171 of this decrease, while the balance is attributable to what may be called the inland division, *i.e.*, the whole of the river St. Lawrence from Cape Chatte on the south side, and from Point des Monts on the north side, to Montreal, including contributory rivers and lakes.

Salmon fishing on the north shore of the gulf shows a considerable increase, while mackerel, lobsters and cod show a decrease.

Prices for cod fell off greatly in 1908, so much so that large quantities were held over for an improved market.

Fishermen have been turning their attention to mill and railway work, in certain parts of the gulf division, during the year under review, and the inspector thinks that this condition of things will continue, and that the hardy class of men who devoted themselves entirely to the fishing is passing out of the business, while the younger men hesitate to face the hardships of their fathers. As a consequence of this, he predicts that in the near future it may not be an uncommon sight to see steam trawlers supplying the demand for fish on the Gaspé coast.

The dreaded dog-fish seems to have been much less in evidence than usual, during the year.

With regard to the fisheries of the other division of the province, it may be remarked that cod fishing in the lower part of Rimouski county was good, but in other parts poor.

Herring fishing was good and yielded good returns. Fishing at Ste. Flavie and Ste. Luce seems to be on the increase owing to easy railway transportation facilities.

Fishermen in this locality do not now dry their codfish, they prefer disposing of it in a green state, that is, split and salted only, as it sells more easily. The fisheries of the county generally, however, have fallen below the results of the previous year.

On the north side of the river the result of the fishery, has fallen below that of 1907, and is attributed to the low state of the river water,

The fisheries of the Island of Orleans also show a decrease when compared with those of 1907. Throughout the province there were 27 more men employed in vessels and 369 fewer men in boats than during the preceding year. Details will be found at appendix 6 of this report.

### ONTARIO.

Complete detailed reports by the provincial officers of the province of Ontario will be found in the 'Second Annual Report of the Game and Fisheries Department,' (1908), of that province, from which the statistics herein are reproduced.

The great lakes have furnished the following total values during the season of 1908:—

Lake of the Woods and Rainy River	\$	141,482
Lake Superior		235,330
Lake Huron (proper)		224,527
		264,381
Lake Huron (north channel)		187.093
Georgian Bay		/
Lake St. Clair and River Thames		65,326
Lake Erie		730,244
Lake Ontario		226,756
Inland waters		24,935
ZIIIIIA TIMONOTO TO		
Total	\$2	2,100,078
Lotal		- 0.0

The foregoing figures show quite a large increase in the total value of fish taken from the waters of the province, over that of 1907, namely, \$165,054. Of this increase, Lake Erie alone accounts for five-sixths, the remaining one-sixth being contributed by Lake Ontario, Lake of the Woods, Lake Huron (proper), Lake Huron (north channel), and Georgian, in that order.

Lakes Superior and St. Clair show small decreases, while the inland waters show a decrease of \$42,318. The following are the principal kinds, showing either a decrease or an increase in total value, as compared with the previous year:—

Whitefish	\$124,475 of an increase.
Herring	119,237 "
Pickerel · · · · · · · · · · · · · · · · · · ·	40.000 C - 1
Pike	8,355 "
Trout	9,457 "
Sturgeon	9,287 "
Caviare	13,450 "
Caviaic	

To the large increase in the fisheries of Lake Erie the chief contributors are: fresh herring, whitefish and perch. There were 57 fewer fishermen employed in vessels or tugs, and 140 more men in boats, throughout the province, than during the previous year. Reports by Inspectors J. M. Hurley, O. B. Sheppard and A. G. Duncan, together with statistics, showing in detail the yield and value of all kinds of fish in the various districts of the province, will be found at Appendix 7 of this report.

### MANITORA

The returns for the Manitoba fisheries of 1908 show that the total value has fallen below that of the preceding year by more than \$200,000. This is attributable largely to the poor condition of the market, especially that for whitefish. Fish were very plentiful, but fishermen did not make any great efforts to catch them, owing to the low price.

The inspector for this province draws attention, in his report, to the fact that while whitefish were very plentiful in Lake Winnipeg the size of the fish seems to have decreased.

Ten years ago, it is pointed out, whitefish averaged one pound more in weight than they do now, notwithstanding the fact that the mesh of the nets at present used, is from one-quarter to half an inch larger than the mesh in use at the period when heavier fish were caught.

. On the other hand, the overseer of Lakes Winnipegosis, Manitoba, Dauphin, &c., reports that whitefish caught in those lakes during the winter of 1908 were larger in size than those caught in previous seasons, and gives as a reason for this increase in

size the closing of the lakes against summer fishing during the past three years. It may be noted that Lake Winnipeg is the only lake in which summer fishing is carried on. The reports all seem to indicate that fish are undoubtedly on the increase as to quantity in all the waters of the province. It would seem that in 1908 little more than half the number of fishermen was engaged in the fisheries that was so employed in 1907.

. A report by the inspector, together with statistics of all fish taken in the province, will be found at Apendix 8 of this report.

### SASKATCHEWAN.

The total value of the fisheries of this province for 1908 is greater than that of the previous year by \$50,305. In the Cumberland district, however, sturgeon value has gone down owing to the lack of buyers on the spot, and the non-existence of a means of transport to a railway point. The catch of whitefish shows a large increase, chiefly in the Battleford lake district, which has produced double that of any previous year. North of Saskatchewan river, the lakes are numerous and large and well stocked with finest varieties of fish.

Those are fished mostly in winter by men who move out and make it a business.

Reports of overseers show that the supply of fish in the province is being maintained as a result of protecting spawning grounds, regulating the length of netting and size of mesh.

Cold storage for fish was established last year and a large quantity stored for the summer trade. The result is being watched with much interest. Fifty-one more fishermen were engaged in the fisheries than during the previous year. A report by the inspector together with statistics of all kinds of fish caught will be found at Appendix 9 of this report.

### ALBERTA.

In the absence of an inspector for the province the special fish guardians have sent their reports direct to Ottawa, from these it is noted that the total quantity of all kinds of fish taken was 40,000 lbs. less than that of the previous year, and the total value less by \$10,000. Whitefish, pickerel, tullibee and coarse fish account for the shortage, while pike shows a large increase. Fuller remarks, along with statistics of all kinds of fish taken from the waters of the province will be found at Appendix 10 of this report.

### YUKON.

In the Yukon Territory the most noteworthy feature is the high price of fish: Trout, for instance, are valued at forty cents per lb. When compared with the figures for Alberta it will be observed that Yukon, with less than one-fourth of the quantity of fish of the former province, actually shows almost \$10,000 more in total value.

This, of course, is in keeping with the price of other food stuffs in the Territory; a large proportion of the fish caught being consumed within the borders of Yukon. Statistics of the various kinds of fish caught will be found at Appendix 11 of this report.

### BRITISH COLUMBIA.

The result of the fisheries of 1908 in this province, is greater than that of the previous year by \$342,116.

The total value of 1907, however, was \$880,425 below that of the year 1906, so that 1908 is still half a million dollars behind 1906; and three and one-third millions behind the record year (1905), in which year British Columbia produced a greater value of fish than Nova Scotia and stood easily at the head of the list of fish producing provinces in Canada.

Over half a million less fathoms of gill and seine netting were used than in the previous year; and 418 fewer persons were employed in fishing. Half the decrease in the number of persons employed is due to the seal business. A careful study of the returns reveals a striking difference in the abundance of fish, especially salmon, in the various districts of the province.

In district No. 1, (southern B.C.) there is a decrease of \$675,013 in all kinds of salmon, while halibut shows an increase of \$148,831. Other kinds of fish mostly show small increases. Sturgeon, however, nearly doubled the total of 1907, though still far behind the years when this fishery was first carried on for commercial purposes. There is a total decrease, in the district, in the value of all kinds, of \$543,149, which is more than made up by the other two districts.

District No. 2, comprising the northern part of the province, as will be seen, is by far the best fish-producing district in the province. Apart from its great salmon fishery, the rich halibut grounds of British Columbia lie within easy distance of this district, and large as the halibut fishery of the district at present is, as soon as the Grand Trunk Pacific railway reaches the western sea the output of this and other fisheries is bound to rapidly grow larger.

The value of salmon of all kinds in the district is greater than that of 1907 by \$366,384. Halibut value has advanced \$11,550 and that of herring \$12,380, making the total value of all kinds \$400,077, greater than that for 1907.

Most of the halibut credited to district No. 1 are brought from the waters of district No. 2, so that by adding the halibut value of the former district to that of the latter, it will be found that the latter district produced more than half the total value of all the fish caught in British Columbia during the year 1908.

District No. 3, which comprises the whole of Vancouver Island and a portion of the mainland adjacent thereto, yielded \$485,184 more than in 1907. Herring in this district show a most striking increase in quantity, chiefly in the Nanaimo district, the increase in value being \$243,047, while salmon of all kinds show an advance in value of \$223,474.

In this district are the headquarters of the British Columbia sealing fleet. Although only half the number of vessels were at work, the total landing of skins was very little below that of 1907. An outstanding feature of this industry is the great value placed on sea otter skins, namely, \$330 each. Reports by the inspectors, with detailed statistics, will be found at Appendix 12 of this report.

The following table is a recapitulation of the quantity and value of all kinds of fish landed in the different provinces of Canada during the year 1908:—

9-10 EDWARD VII., A. 1910  ${\bf RECAPITU} \label{eq:equation}$  Showing the whole production of the Fisheries in the

	Kinds of Fish.	Nova	Scotia.	New B	RUNSWICK.	P. E.
Number	Ainus of Fish.	Quantity.	Value.	Quantity.	Value.	Quantity.
			\$		\$	
1 2 2 3 4 4 5 6 6 7 8 8 9 10 111 122 13 14 4 15 6 16 17 18 14 25 6 27 28 24 25 6 27 28 30 31 32 33 34 42 43 44 44 45 46 47 48 49 50 1	Cod, dried Cwt.  I fresh or green Lb.  It tongues and sounds Brls. Haddock, dried Cwt.  I fresh Lb.  I smoked (finnans) Lb.  Hake, dried Cwt.  Tom Cod or frost fish Lb. Halibut. Flounders Lb.  I smoked I salted I gresh I lb.  I pickled and dry salted I ground I lb.  Whitefish I lb.  Smelts I lb.  Whitefish I lb.  Herring, salted Brls.  I fresh I lb.  I smoked I lb.  I smoked I lb.  Whitefish I lb.  Smelts I lb.  Herring, salted Brls.  I fresh I lb.  I smoked I lb.  I fresh I lb.  Whitefish I lb.  Smelts I lb.  Herring, salted Brls.  Herring, salted Brls.  I fresh or salted Brls.  Shad Brls.  Shad Brls.  Maewives I lb.  Maskinongé I lb.  Ferch I lb.  Perch I lb.  Brls.  Hersh Cans.  I fresh Lb.  Mackerel, salted Brls.  Sturgeon I lb.  Lobsters, canned I lb.  Lobsters, canned I lb.  Lobsters Cansa, quahaugs, scallops I lb.  Fur seal skins I B. C No.  Hair seal skins I lb.  Fur seal skins I lb.	598 9,172	\$ 1,810,686 123,165 10,750 236,490 209,065 184,360 316,111 16,785 261,601 6,460 133,203 21,701 645 97,532 2,825 16,994 36,047 534,774 66,636 23,957  5,980 36,688 40,760  670 843,240 297,808 1,319,882 834,612 9,090 54,572 86,984 87,166	84,757 386,800 4,546 1,547,700 218,900 47,636 30,565 2,069,000 156,036 537,000 3,856 5,422,500	381,406 115,472 13,800 13,638 146,431 14,094 119,075 15,605 19,097 15,605 16,710 288 20,252,575 2,056 19,105 15,605 19,105 15,777 380,640 192,255 192,257 2,056 19,105 10,	76 1,760 31,350 9,837 20,366 24,450 817,500 817,500 45,500 362 510 3,098,444 530 11,472 6,654 85 240
51 52 53 54 55 56 57	Sea-otter skins.  Beluga skins and whale product.  Fish used as bait.  Brls.  " fertilizer.  " oil. Gall.  Dulse, cockles and other shell fish Lb.  Tullibee, carp and greyling. "	96,922 124,323 249,673	145,383 62,161 74,901	121,655 270,655 57,300 259,000	182,482 136,805 17,190 11,830	53,114 2,107 7,820
	Totals		8,009,838		4,754,298	• • • • • • • • •

SESSIONAL PAPER No. 22

# LATION.

different Provinces of Canada for the Year 1908.

Island.	Que	BEC.	Ont	ARIO.	Manitoba Saskatch Yui	ALBERTA, EWAN AND	British Columbi	
Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
\$		\$		\$		\$		\$
115,060 760	309,800 179	15,490 1,790					630,000	37,800
5,280 940	5,750	6,330 172						
24,592 10,183		825						
	26,400 213,390	792 20,856			,		17,512,555	875,652
	1,011,297	151,889			105,000	15,000	27,182,544 3,624,631	218,631
2,445	44,600 110,440	3,345 11,044	6,333,602			22,889	420,000	541,740
32,700	40,000 35,270 218,820	3,527	4,826,643			370,358	383,900	19,195
37,386 1,271 910	28,378 830,054	127,701 8,300	1,691 7,140,826	357,041			625,200 44,965,200	
910	276,450	5,529						18,160
· · · · · · · · · · · · · · · · · · ·	159 • 184						40	
1,448	74,050 3,510	3,702	2,079,601	166,368	3,386,075	115,117		
5,100	159 435,360 43,600	1,590 26,121	22.835	1,370		1,561		
	77,770 33,000	7,777	3,005,891	300,589	3,171,650	190,721		
22,950 3,456	8,313	1						
	56,520		10,437	10,201	96,500 12,800	9,650 12,800	180,000	9,000
929,533 3,710 68,832	205	1,025					2,960	
26,616 340 480							7,268	16,810 115,500
400	445,595	4,455	2,246,867	125,605	2,825,370	90,500	4,704	27,805 108,988
	33,549						5,220 33	3,015 10,895 357,500
79,671 2,107 2,346	58,991 80,730	88,486 40,364					840 142,480	2,352 56,646
	*******		535,417	15,446	574,168	32,796		7,035
1,378,624		1,881,817		2,100,078				6,465,038

# NUMBER OF PERSONS EMPLOYED AND AMOUNT OF CAPITAL INVESTED IN FISHERIES.

During the year 1908 there were employed in the actual work of fishing in the whole of Canada 8,550 men on board of vessels and 62,520 in boats. In canneries and fish houses on shore there were employed in the work of cleaning and preparing the fish for market 13,753 persons, giving a grand total, of those directly employed in the work of fisheries, of 84,823.

This shows an increase of 460 men in vessels, a decrease of 645 men in boats, and an increase in the number of fish workers on shore, of 2,311, making altogether an increase in the grand total of 2,127 over the previous year.

Apart from the above there are many persons connected with the fisheries in a more indirect way, such as coopers, teamsters, net and ropemakers, boat-builders, &c., who are not taken into account in making up those returns.

Almost 14 million fathoms, of gill and seine netting—equal to about 16,000 miles—were in use during the year, the total value of which, along with that of lines and other means of capture—exclusive of lobster plant—is given at nearly 3½ millions of dollars. The value of vessels and boats aggregates over 5¼ millions of dollars.

The following table shows, by provinces the details of men employed and the value of vessels, gear, &c.:—

RECAPITULATION

Sof the Value of Fishing Implements, Vessels, Boats, Nets, &c., including all capital invested in Fishing Industry of Canada, 190S, with  $-E_{\frac{1}{2}}$ 

nneries, 5, etc.	Persons in ca	€	3,706 5,819 2,440 1,428 400 1,3753
g other	AsmixorqqA  respectively. The sesure of the	<b>6</b> €	1,521,180 603,320 25,990 364,909 96,435 170,300 5,500 1,775 5,040,139
Value of lobster		60	766, 386 408, 260 377, 365 178, 393 178, 393 1,730, 404
'stau - p	walue of lin voun bana bana bete.	€€	351,901 376,793 143,551 143,551 173,097 56,600 61,700 3,750 1,185,877
SEINES.	Value,	€€	798,093 444,230 44,857 172,591 315,108 9,966 1,804 1,804 1,804 2,283,127
NETS AND SEINES	Fathoms.		1,874,359 1,075,780 1,075,780 243,074 5,669,847 3,975,528 521,00 7758,370
BOATS.	Value,	40	570,612 34,060 56,526 217,503 144,117 17,750 7,045 2,161 336,282 1,696,856
Bo	Number.		15,442 9,025 1,848 6,109 1,439 1,439 1,439 1,43 1,45 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,0
	Value.	€€	1,043,976 188,900 188,900 24,785 24,785 397,127 140,000 1,758,658
Vessels.	Tonnage.		20,503 5,169 627 872 6,062 1,210 6,375 6,375
	Number.		\$68 \$68 \$5 \$28 \$145 \$1145 \$175 \$175 \$175
MEN.	Boats.		19,447 14,173 3,328 10,746 2,595 450 10,855 30 62,520
FISHERMEN	Yessels,		6,074 1,427 1,71 171 147 668 110 110 8,550
	Provinces.		Nova Scotia.  New Brunswick New Brunswick Outario Outario Manitoba Alberta. Alberta. Artich Columbia Totals.  Totals.

† Includes one steam trawler. \* Including 36 vessels in sealing fleet with equipment. ‡ Chiefly tugs.

RECAPITULATION showing the Total Value of the Fisheries in the respective Provinces of Canada, from 1870 to 1908 inclusive, as com piled from the Annual Reports of the Department of Fisheries.

Year.	Nova Scotia.	New Brunswick.	Prince Edward Island.	Quebec.	Ontario.	British Columbia.	Manitoba, Saskatchewan, Alberta and Yukon.	Total for Canada.
870	\$ 4,019,425	\$ 1,131,433	\$ No data.	\$ 1,161,551	\$ 264,982	\$ No data.	\$ No data.	\$ 6,577,391
2672	5,101,030 6,016,835	1,185,033	= =	1,035,012	130,524	= =	= =	9,570,116
873	6,577,085	2,285,662	207,595	1,391,564	293,091	=	=	10,754,997
874	6,652,302	2,685,794	288,863	1,608,660	440,207	= :	= =	10,350,385
0,00	6,029,050	1,953,389	494,967	2,097,668	437,229	104,697	: :	11,117,000
877	5,527,858	2,133,237	763,036	2,560,147	438,223		=	12,005,934
878.	6,131,600	2,305,790	840,344	2,664,055	348,122	925,767	<b>=</b> :	13,219,678
6279	0,702,937	2,554,(22	1,402,501	2,520,530	907, 199 444 491	713,335	= =	14,499,979
8881	6.214.782	2,930,904	1,955,290	2,751,962	509,903	1,454,321	: ::	15,817,162
888	7.131.418	3,192,339	1,855,687	1,976,516	825, 457	1,842,675	=	16,824,092
60000	7,689,374	3,185,674	1,272,468	2,138,997	1,027,033	1,644,646	=	16,958,192
	8,763,779	3,730,454	1,085,619	1,694,561	1,133,724	1,358,267	=	17,766,404
1885	8,283,922	4,005,431	1,293,430	1,719,460	1,342,692	1,078,058	100 000	10,622,319
1886.	8,415,362	4,180,22/	1,141,991	1,741,382	1,450,998	1,077,040	199,084	18,386,103
	0,010,102	9,000,001	876,869	1.860.012	1,839,869	1,902,195	180,677	17,418,510
	6.346.722	3,067,039	886,430	1,876,194	1,963,123	3,348,067		17,655,256
0687	6,636,444	2,699,055	1,041,109	1,615,119	2,009,637	3,481,432		17,714,902
1891	7,011,300	3,571,050	1,238,733	2,008,678	1,806,389	3,008,755		18,977,878
	6,340,724	3,203,922	1,179,856	2,236,732	2,042,198	2,849,483		18,941,171
1893.	0,407,279 6 E47 997	3,740,121	1,159,500	9,303,386	1,034,950	3,415,505		20,000,001
895	6.213.131	4.403.158	976,836	1,867,920	1,584,473	4,401,354		20,199,338
968	6,070,895	4,799,433	976,126	2,025,754	1,605,674	4,183,999		20,407,425
1897.	8,090,346	3,934,135	954,949	1,737,011	1,289,822	6,138,865		22,783,546
1898	7,226,034	3,849,357	1,070,202	1,761,440	1,433,632	3,713,101		13,007,121
	7,347,604	4,119,891	1,043,645	1,903,134	1,530,447	0,214,014		91,557,639
1900.	7,809,102	0,709,742	1,050,135	9,174,459	1,498,078	7,942,771	,	25,737,153
1009	7 251 753	3,400,201	887 024	2,059,175	1,265,706	5,284,824		21,959,433
1903	7.841.602	4,186,800	1,099,510	2,211,792	1,535,144	4,748,365		23,101,878
1904	7,287,099	4,671,084	1,077,546	1,751,397	1,793,229	5,219,107		23,516,439
1905.	8,259,085	4,847,090	998,922	2,003,716	1,708,963	9,850,216		29,479,562
1906.	7,799,160	4,905,225	1,168,939	2,175,035	1,734,856	7,003,347		26,279,485
1908.	8,009,838	4,754,298	1,378,624	1,881,817	2,100,078	6,465,038	861,392	25, 451,085
	\$970 585 016	\$133 384 987	\$32 393 063	\$76 500 046	\$47 115 081	R118 040 357	\$18 794 573	\$709,675,143

COMPARATIVE TABLE showing Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries of Canada, together with the Value of Fishing Materials employed, from 1880 to 1908.

Year.		Vessels.		Во	ATS.	Value of Nets and	Value of other	Total Capital
rear.	No.	Tonnage.	Value.	No.	Value.	Seines.	Fishing Material.	Invested.
			\$		\$	\$	\$	\$ ,
1880	1,181	45,323	1,814,688	25,266	716,352	985,978	419,564	3,936,582
1881	1,120	48,389	1,765,870	26,108	696,710	970,617	679,852	4,113,049
1882	1,140	42,845	1,749,717	26,747	833,137	1,351,193	823,938	4,757,985
1883	1,198	48,106	2,023,045	25,825	733,186	1,243,366	1,070,930	5,120,527
1884	1,182	42,747	1,866,711	24,287	741,727	1,191,579	1,224,646	5,014,663
1885	1,177	48,728	2,021,633	28,472	852,257	1,219,284	2,604,285	6,697,459
1886	1,133	44,605	1,890,411	28,187	850,545	1,263,152	2,720,187	6,814,295
1887	1,168	44,845	1,989,840	28,092	875,316	1,499,328	2,384,356	6,748,840
1888	1,137	33,247	2,017,558	27,384	859,953	1,594,992	2,390,502	6,863,005
1889	1,100	44,936	2,064,918	29,555	965,010	1,591,085	2,149,138	6,770,151
1890	1,069	43,084	2,152,790	29,803	924,346	1,695,358	2,600,147	7,372,641
1891	1,027	39,377	2,125,355	30,438	1,007,815	1,644,892	2,598,124	7,376,186
1892	988	37,205	2,112,875	30,513	1,041,972	1,475,043	3,017,945	7,647,835
1893	1,104	40,096	2,246,373	31,508	955,109	1,637,707	3,174,404	8,681,557
1894	1,178	41,768	2,409,029	34,102	1,009,189	1,921,352	4,099,546	9,439,116
1895	1,121	37,829	2,318,290	34,268	1,014,057	1,713,190	4,208,311	9,253,848
1896	1,217	42,447	2,041,130	35,398	1,110,920	2,146,934	4,527,267	9,826,251
1897	1,184	40,679	1,701,239	37,693	1,128,682	1,955,304	4,585,569	9,370,794
1898	1,154	38,011	1,707,180	38,675	1,136,943	2,075,928	4,940,046	9,860,097
1899	1,178	38,508	1,716,973	38,538	1,195,856	2,162,876	5,074,135	10,149,840
1900	1,212	41,307	1,940,329	38,930	1,248,171	2,405,860	5,395,765	10,990,125
1901	1,231	40,358	2,417,680	38,186	1,212,297	2,312,187	5,549,136	11,491,300
1902	1,296	49,888	2,620,661	41,667	1,199,598	2,103,621	5,382,079	11,305,959
1903	1,343	42,712	2,755,150	40,943	1,338,003	2,305,444	5,842,857	12,241,454
1904			2,592,527	41,938	1,376,165	2,189,666	6,198,584	12,356,942
1905			2,813,834	41,463	1,373,337	2,310,508	6,383,218	12,880,897
1906	1,439		2,841,875	39,634	1,462,374	2,426,341	7,824,975	14,555,565
1907			2,731,888	38,711	1,437,196	2,266,722	8,374,440	14,826,595
1908			3,571,871	39,965	1,696,856	2,283,127	7,957,500	15,508,275

9-10 EDWARD VII., A. 1910

Comparative Table showing the Number of Men employed in the Fishing Industry since 1895.

Year.	Number of Persons in Lobster Canneries and fish-houses.	Number of Men in Vessels.	Number of Men in Boats.	Total Number of Fishermen.	Total Number of Persons in Fishing Industry.
1895	13,030	9,804	61,530	71,334	84,364
1896	14,175	9,735	65,502	75,237	89,412
1897	15,165	8,879	70,080	78,959	94,124
1898	16,548	8,657	72,877	81,534	_98,082
1899	18,708	8,970	70,893	79,893	98,601
1900	18,205	9,205	71,859	81,064	99,269
1901	15,315	9,148	69,142	78,290	93,605
1902	13,563	9,123	68,678	77,801	91,364
1903	14,018	9,304	69,830	79,134	93,152
1904	13,981	9,236	68,109	77,345	91,326
1905	14,037	9,366	73,505	82,871	96,908
1906	12,317	8,458	67,646	76,104	88,421
1907	11,442	8,089	63,165	71,254	82,696
1908	13,753	8,550	62,520	71,070	84,823

### FISHERIES EXPENDITURE AND REVENUE.

The statement of the total expenditure and revenue in connection with the fisheries of Canada during the fiscal year ending March 31 last, forms Appendix 1 of this report.

The total expenditure amounted to \$951,728, being divided amongst the various services as follows:—Salaries and disbursements of fishery officers, \$161,756; fish breeding, \$190,563; fisheries protection service, \$242,601; miscellaneous expenditure, \$196,808; and \$159,999, distributed as fishing bounty.

The total amount received as revenue from fishing licenses, fines, &c., during the same period in the different provinces was \$82,715, which includes the sum of \$9,794, paid by United States vessels as modus vivendi fees.

### FISHING BOUNTIES.

The fishermen of the maritime provinces received the sum of \$159,999 as bounties on their respective catches of sea fish for the season of 1908. The number of claims received during 1908 was 13,972, and the number paid was 13,841, being an increase of 648 claims paid over the previous year.

The sum of \$62.540 was paid to 925 vessels with their crews, being a decrease of two vessels; and the sum of \$97,459 was paid to 21.669 boat fishermen in 12,916 boats, being an increase of 1.140 b at fishermen and 650 boats over the preceding year.

The proportion of the total bounty expended in each province for 1908 was as fillers:—In Nova Scotia, \$98,156; in New Brunswick, \$17,203; in Prince Edward Island, \$9,708; in Quebec, \$34,931.

Since the inception of the system in 1882 the sum of \$4,265,815 has been paid to those fishermen, in the above-named provinces, who became entitled—under the regulations—to the bounty, to encourage them in the development of their industry.

The regulations governing the payment of the bounty, as well as the particulars respecting its distribution, form Appendix 2 of this report.

### FISH BREEDING.

The report in this service by F. H. Cunningham, Superintendent of Fish Culture, will be found at Appendix 13 of this report.

A new boster hatchery has been installed at Georgetown, P.E.I., since the previous report was issued,

There are in all 37 fish-breeding establishments in the Dominion, the aggregate output of which, during 1908, was 682 millions of fry of various kinds.

An interesting experiment was carried out in the course of the year 1908 by this branch of the fisheries service, in the shape of transhipping live lobsters from Halifax to Vancouver, with a view to establishing this shell fish in the waters of the Pacific province, a report of the journey and of the distribution of the crustacean on arrival at Vancouver, is included in Mr. Cunningham's report, and will be found at Appendix 13.

### OYSTER CULTURE.

A report in this service for 1908, by the department's oyster expert, forms Appendix 14 of this report. It would appear from the report that the oyster beds of Upper Caraquet harbour are in some langer of being covered up with drifting sand from Mizzonette Point.

### BAIT COLD STORAGE.

A detailed report of this service will be found at Appendix 15.

The e are in all 62 bait freezers along the Atlantic coast, distributed as follows:-

In	Nova Septia	. 39
	Vew Brunswick	. 1
	Prince Edward Island	
	)uelec	
	Total	. 62

One freezer in Nova Scotia was destroyed by fire during 1908.

#### THE FISHERIES STAFF.

The outside staff of the fisheries branch of this department numbers 1,200.

There are twenty inspectors of fisheries, and 108 overseers with magisterial powers ex-officio, besides 680 guardians temporarily employed to assist in the protection of the fisheries.

The officers in charge of our fish breeding establishments with their permanent assistants aggregate 100, besides many others who are required in the busy season.

The officers and men of the fleet of fishery cruisers aggregate 250. There are also about forty-five persons employed as reporters for the intelligence bureau, which exists at Halifax during the fishing season, who are not otherwise connected with government work.

A complete list of the various permanent outside officers and overseers forms Appendix 16 of this report.

### FISHERIES PROTECTION SERVICE.

This service was performed by thirteen fishery protection vessels in all during 1908. Of these, six patrolled our Atlantic and Gulf of St. Lawrence waters; one was stationed on the great lakes, one on Lake Winnipeg and five on the Pacific coast.

A report by the officer commanding the service forms Appendix 17 of this report.

### PROSECUTIONS FOR VIOLATION OF THE FISHERIES ACT.

A return showing the number of prosecutions for violation of the Fisheries Act, the nature of the offences, and the amount of penalties imposed and collected throughout the various provinces of the Dominion, during the fiscal year 1908-9, constitutes Appendix 18 of this report.

### HERRING AND HERRING CURING.

At Appendix 19 will be found a report by Mr. J. J. Cowie on his work during the summer of 1908, in continuance of the department's scheme for improving herring curing in Canada.

### STEAM TRAWLING.

At Appendix 20 will be found a report, by Mr. J. J. Cowie, on the work of the steam trawler *Wren*, during the season, 1908, together with a description of this mode of fishing, observations on trawling in general, and a sketch of the various legislative steps which have been taken from time to time in Great Britain for its regulation there.

### NATURAL HISTORY REPORT.

The report of Mr. Andrew Halkett, the naturalist of the Department, embracing, among other things, some interesting information touching the lakes in the provinces of Alberta and Saskatchewan, forms Appendix 21 of this report.

#### CONCLUSION.

The various fisheries of the Dominion were prosecuted, throughout the year 1908, by our fishermen with their accustomed energy.

I regret to have to report, however, that the result of their efforts again shows a diminution in the total value.

But several causes, other than scarcity or abundance of fish, affect the total quantity and value of the landings, in the course of a year, either for the better or worse.

The uncertain movements of the schools of fish, the state of the weather throughout the season, and the condition of the various markets have to be taken into consideration when drawing conclusions from the mass of figures contained in this report.

In almost every case where a considerable decrease in the value of a certain class of fish appears, the reason is to be found, not in any diminution of our fishery resources, but in some one or other of the aforementioned causes. Therefore, although the value of 1908 falls below that of 1907, and 1907 below that of 1906, there need be no uneasiness as to the continued fertility of our varied fishing grounds.

I have the honour to be, sir,

Your obedient servant, G. J. DESBARATS,

Acting Deputy Minister of Marine and Fisheries,



# SPECIAL APPENDED REPORTS

I

# THE FISH AND FISHERIES OF MANITOBA

 $\mathbf{B}\mathbf{Y}$ 

# PROFESSOR E. E. PRINCE

Dominion Commissioner of Fisheries

# II .

# THE MARINE AND FISHERIES COMMITTEE

AND THE

# LOBSTER FISHERY

BY

R. N. VENNING.

(Superintendent of Fisheries.)



# SPECIAL APPENDED REPORT-I.

# THE FISH AND FISHERIES OF MANITOBA.

BY PROFESSOR EDWARD E. PRINCE, F.R.S.C., ETC., DOMINION COMMISSIONER OF FISHERIES, OTTAWA, MEMBER OF THE INTERNATIONAL FISHERIES COMMISSION.

### INTRODUCTION.

Elisee Reclus regarded the lakes of Manitoba as shallow remnants of an ancient inland sea which now exist because the compact rocks below will not allow the water to flow away into the depths below but retain it as though each were still a natural lake basin. The moisture, he thought which falls from the atmosphere is retained in these depressions, evaporation does not take place rapidly, and the slopes towards the sea are not sufficiently inclined for the tributary rivers to pour down to the ocean all their surplus waters. Geographically they are the western members of the great lake system, that chain of vast inland seas which border the southern margin of the great Archean shield, in whose immense northern basin lie the waters of Hudson bay. Geologically, they belong to another system than the eastern great lakes, and are all that remain of that extensive post-glacial Lake Agassiz which geologists claim to have had an area of not less than 110,000 square miles. They are a northern expansion of the Mississippi system of waters with which on the east (south of the Lake of the Woods) and on the west, near the Cypress Hills, there is still connection by muskegs. and marshy streams. Great deposits of alluvium have increased the shallowness, and the valleys of the Red river and Assiniboine are entirely alluvial formation, these sediments, as the late Dr. George M. Dawson said, 'constitute the richest wheat lands of Manitoba.'

### I.—THE FISHERIES.

# PECULIAR FEATURES IN FISH OCCURRING.

The fish fauna is not rich in variety of species or indeed of families, yet it is singularly interesting as much from the forms which are missing as from those which it includes. Thus the two remarkable Ganoids, Lepisosteus, the Gar Pike, and Amia calva the Bow-fin or lake Dog-fish, so abundant in the eastern Great Lake Waters are absent, and indicate that the fish fauna is of a somewhat recent origin as compared with the Ontario lakes. The cartilaginous Ganoids, two species of sturgeons are present, but are no doubt migrants from the sea by northern or southern river channels. The great lake trout appears to be absent, and the lesser whitefish, commonly called lake herring, Argyrosomus artedi, has not been recorded, but the tullibee, A. tullibee, often stated to be a hybrid whitefish, and weighing one to three pounds, is plentiful. Two species of the typical whitefish of Canada, Coregonus clupeiformis, the most valuable species commercially, and C. labradoricus, occur in Manitoba waters.

### IMPORTANCE OF MANITOBA FISHERIES.

It has been justifiably claimed for the fishing industries of this prairie province that they are the greatest fresh-water fisheries in the world. The earliest fishery was

carried on by the native Indian tribes for food for themselves and their dogs, but the officers of the Hudson's Bay Company at their numerous posts in this region depended upon fish very largely, and since 1812, when the first white settlers were brought to the banks of the Red river by Lord Selkirk, a regular fishery has been pursued which has grown to enormous dimensions during the last thirty years.

# COMMERCIAL KINDS OF FISH.

The species of principal importance are the unsurpassed lake whitefish (Coregonus clupeiformis), the pike-perch or yellow pickerel (Stizostedion vitreum), the sturgeon (Acipenser) and the pike or jackfish (Lucius). The whitefish of Manitoba especially of Lake Winnipeg have a special reputation in the markets of this continent and the caviare and flesh of the sturgeon from these waters have ranked very high. The supply of sturgeon has seriously declined, but the relative importance of the principal species may be judged from the following figures:—

Kinds of Fish.	1888.		1898.		1907-08.	
Whitefish. Pike-perch Pike Tullibee.	Lb.  2,300,000 144,500 311,000 18,736	Value. \$ 106,000 5,800 8,200 650	Lb. 3,363,900 1,343,000 639,973 359,410	Value. \$ 168,193 53,721 6,399 3,594	3,995,000	Value. \$ 258,650 239,700 81,235 48,300

### RECENT EXPANSION.

During the last twenty years the annual value of the fisheries of the province has risen rapidly, partly owing to the exploitation of new waters not before commercially fished, and partly owing to the higher market value of the food-fishes in recent years. Thus in 1887 the total value was \$129,084; in 1897 \$261,126, and in 1907 it was \$806,615. While a proportion of the catch is sent to local and to eastern Canadian markets, the greater part, fully 75 per cent, is sent to the United States' markets, certain large foreign fish combines having undoubted control of the handling of these supplies of Canadian fish.

### AREA OF FISHING GROUNDS.

The total area of the waters fished is not less than 20,000 square miles, the three largest lakes, Lake Winnipeg (9,460 square miles), Lake Winnipegosis (2,086 square miles), and Lake Manitoba (1,775 square miles), exceeding the Netherlands in extent, but other lakes, St. Martin, Dauphin, Shoal, Swan and Waterhen, contribute their quota, these ranging from 100 to 200 square miles, while Moose (552 square miles) Cedar (285 square miles), Playgreen (223 square miles), and other more distant lakes, though beyond the provincial boundary, must be included in the Manitoba fisheries, all the catches being sent down to the main shipping points in the province. It is interesting to note that the Manitoba lakes are exclusively in Canadian territory and are not shared, as are the Great Lakes to the east, with another country. Hence, while Lake Superior is over three times the area of Lake Winnipeg, Huron twice, and Erie almost of the same area, yet the superficial extent of the Canadian portion of these eastern waters does not greatly exceed the total area of the Manitoba fishing grounds.

### LARGE ENTERPRISES CARRIED ON.

To develop the fishing industry on an adequate scale, in waters so vast, large capital was essential. Fishing companies were organized, with fleets of steam tugs, immense outfits of nets, ice-houses and stores, refrigerators, &c. Fishing on a limited scale has always been carried on by the settlers and Indians, and the numerous Ice-landic settlements have assiduously pursued the fishery especially through the ice in winter. But even so recently as 1899 the Winnipeg board of trade stated that the fishing industries of the province were only in their infancy, and undoubtedly with proper safeguards against depletion these industries, which have increased like the population of the province, more than six-fold during the last twenty years, await still further development.

### PRODUCTIVENESS OF WATERS.

The productiveness of the waters of the province is proved by the fact that from 1890 to 1907, 84,000,000 pounds of whitefish were shipped from Manitoba and 5,329,000 pounds of sturgeon, including a large quantity of caviare, much of it exported to Germany to be sold as the best Russian product.

#### ALLEGED DECLINE OF FISHERIES.

Like all fisheries, those of the province have been subject to fluctuations, some, such as the sturgeon, having alarmingly declined, while others, like the pike-perch or pickerel fishery, have greatly expanded. The whitefish supply, in the opinion of many, has declined, and the large annual catch, in 1906, exceeding 5,000,000 pounds, is, it is held, kept up only by more persistent fishing and the use of excessive amounts of gear.

### DETAILS OF THE INDUSTRY.

All fishing operations are carried on under license from the Dominion government, and under the supervision of a staff of Federal fishery officers who have authority

to enforce the laws and regulations under the Dominon Fishery Act.

The parties who carry on fishing consist of (1) large fishing companies in which United States firms have very large interests; they operate in the northern parts of Lake Winnipeg and the more distant lakes, chiefly in summer, and in extensive areas where fishermen without capital, tugs, fish-houses and refrigerators could not take or handle the fish. (2) Settlers, largely Icelanders, with a smaller proportion of Austrians and Germans, who fish in summer in small boats and on a vastly more extensive scale through the ice in winter, mainly in the shallower southern parts of Lake Winnipeg and in the smaller lakes. (3) Indians and half-breeds who fish from their reserves, largely for food, but also for sale, especially sturgeon. In the rivers, such as the Red river, settlers and others fish with seines, &c., for pickerel or pike, perch, catfish, gold-eyes (an excellent fresh water herring), perch and coarse fish.

### STATISTICS OF MEN AND GEAR.

It is estimated that at least 5,000 persons are more or less engaged in the fisheries, but the actual number of fishermen is nearly 2,000, as compared with 850 twenty years ago. In 1887, it may be noted, there were 7 steam tugs, 550 tons total, valued at \$26,500, and 65 fishing boats, 118 tons, valued at \$6,785, whereas there are now 22 tugs, of 1,034 tons total tonnage, valued at \$132,000 and employing about 150 men, and in addition 530 boats, valued at \$24,000, with crews totalling up to 1,800 men. Fishing with baited lines, fyke or hoop nets, &c., is extensively pursued, and

the takes are principally coarse fish, the present annual catch of which amounts to no less than five million pounds.

### TRANSPORTATION OF FISH.

The cleaning of the fish, icing, &c., are done at various points on the lakes, such as Spider island, Black river, Eagle island, Poplar river, Beren's river, Snake island. Bull Head, Horse island and Warren's landing, each resembling a busy village, with what is and crowded dwellings, the last-mamed centre being about 400 miles from Winnipeg city. About ten years ago fresh fish in broken ice were brought from Selkirk island, north end of Lake Winnipeg, and shipped from Selkirk town in refrigerator cars, were preferred in some United States cities to the frozen fish heretofore exported, and a large business has since been maintained. The main catches conveyed by the tugs and sail-boats to the various islands referred to, after being cleaned packed and iced are brought down to Selkirk in the case of Lake Winnipeg, and to the town of Winnipegosis in the case of Lakes Winnipegosis, Cedar, Moose, &c.

### SYSTEM OF FISH FREEZING.

From over a hundred of these remote establishments, with plants valued at nearly \$250,000, the principal summer catches have been received at the refrigerators, that of the Dominion Fish Company's at Selkirk, said to be the largest in Canada if not the largest on the American continent, having a capacity of two million pounds, though many times that amount passed through the freezing rooms in a single season, the fish being neatly laid on flat trays, subjected to a temperature of 15° F. below zero, and exported by the carload when the markets are favourable. The ammonia process is that adopted, the ammonia being forced by powerful engines into vacua, thus reducing the temperature, and the cold gas is then driven through circulating pipes, which pass along the insulated store rooms, where a temperature of 20° below freezing can be readily attained, but the usual temperature is about zero. Recent changes in the demands of the great markets appear likely to cause the frozen fish to be superseded by the iced fish referred to above, and there can be little doubt that the quality and texture of the fish are maintained in better state by icing than by the ammonia freezing process.

### DOMINION HAS SOLE CONTROL.

Unlike the fisheries of Ontario and the eastern provinces and British Columbia, in which each province has property rights, the property and jurisdiction are in Manitoba solely in the hands of the Dominion government, and the Minister of Marine and Fisheries, Ottawa, issues licenses, authorizes restrictions, close seasons, &c., for the preservation of the fishery resources. As an aid, of an effective kind, the federal government has erected several fish-hatcheries (at Selkirk, Beren's river, Winnipegosis, &c.) and vast quantities of fry of whitefish and other valuable species are planted each season from these establishments.

## II.—NOTES ON THE FISHES OF MANITOBA.

Apart from their commercial interest the fishes of the province are of scientific importance from the fact that they form a fish fauna distinctly marked off from that of the great lakes and eastern waters and have nothing in common with the Pacific fish fauna. None of the ancient fresh-water types such as the gar-pike (*Lepisosteus osseus*, Linn.) and Bowfin (*Amia calva*, Linn.) occur, though sturgeon of two species

are found, but the sturgeon is doubtless primitively, an anadromous ocean fish. The greatlake trout (Cristivomar namaycush, Walb.), the speckled char or brook trout (Salvelinus fontinalis, Mitch.), the lesser whitefish (Argyrosomus artedi, LeSeur), the sea salmon (Salmo salar, Linn.), as also the black spotted trout (S. Clarkii) of Albertan waters, the inconnu of the Mackenzie, and various Arctic and Pacific salmon and trout are absent, and bear out the geologists view that the Manitoba system of lakes and rivers is unconnected with the eastern and western drainage systems, and is really the remnant of a northern expansion of the Missouri and Mississippi system with an outflow to the south. The presence of the gold-eye, (Hiodon chrysopsis, Richardson), an ally of the Clupeidae, a very plentiful and excellent food-fish, emphasize the separateness of this aquatic area, while the presence of the sturgeon and of the methy or lake ling, (Lota maculosa, LeSeur), indicates connection with the sea such as the geologists have demonstrated occurred owing to subsidence at various epochs. Such universally distributed species as the pikes or jack-fishes (of which two species occur Lucius lucius, Linn., and Lucius masquinongy, Mitchell) and both of exceptionally good table qualities as well as the bearded cat-fishes and carp-like suckers occur but the glutinous nature of their eggs may explain their dispersion, The following list of species is believed to include most of the fishes authentically known to occur, but many other species await discovery in this extensive area of waters where investigations so far have been fragmentary and inadequate.

## LIST OF MANITOBA FISHES.

Family Petr myzontide-

Ichthyamyzon castaneus, Girard. The Northern Lamprey.

Family Acipenserida-

Acipenser rubicundus, Lesuer. The Lake Sturgeon.
Acipenser sturio, Linnaeus. The Common Sturgeon.

Family Silurida-

Ictalurus punctatus, Rafinesque. Channel or Spotted Catfish.

Ameiurus lacustris, Walbaum. Great Lake Catfish or Mathemeag.

Ameiurus vulgaris, Thompson. The Dark Catfish.

Ameiurus nebulosus, LeSueur. Common Bullhead or Horned Pout.

### Family Catostomida-

Ictiobus cyprinella, Cuv. and Valenciennes. Buffalo-fish.
Ictiobus bubalis, Rafinesque. The White or Small Mouth Buffalo-fish.
Catastomus catostomus, Forster. Northern Sucker.
Catastomus commersonii, Lacepede. Common White Sucker.
Carp odes velifer, Rafinesque. The Quillback Sucker.
Moxostoma anisurum, Rafinesque. White-nosed Red Horse.
Moxostoma aureolum, LeSueur. The Mullet or Red Horse.
Mosostoma lesueuri, Richardson. Northern Red Horse.

# Family Cyprinida-

Hybognathus nuchalis, Agassiz. The Silver Minnow.
Hybognathus argyritis, Girard. The White Minnow.
Pimphales prompelas, Rafinesque. The Fathead or Bull Minnow.
Notropis blennius, Girard. Straw-coloured Minnow.
Notropis hudsonius selene, Starr Jordan. The Shiner, Spawn Eater.
Notropis je junus, Forbes. The Poor Minnow.
Notropis atherinoides, Rafinesque. The Great Minnow.
Hybopsis storerianus, Kirtland. Storer's Minnow.

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# Family Hiodontida-

Hiodon chrysopsis, Richardson. Western Gold-Eye. Hiodon tergisus, LeSueur. The Moon-Eye. Hiodon alosides, Rafinesque. The Shad Moon-Eye.

### Family Salmonide-

Coregonus clupeiformis, Mitchell. The Common Lake Whitefish.
Coregonus labradoricus, Richardson. Labrador Whitefish.
Cristivemer namaycush, Walbaum. Great Lake Trout, Touladi or Grey Trout.
Argyrosomus tullibee, Richardson. The Tullibee or Mongrel Whitefish.

## Family Esoccide or Luciide-

Lucius lucius, Linnæus. The Jack-fish or Pike.
Lucius masquinongy, Mitchell. The Maskinonge (erroneously Muskellunge).

# Fami'y Gastrosteidæ-

Pygosteus pungitius, Linnæus. One-spined Stickleback. Eucalia inconstans, Kirtland. Brook Stickleback.

# Family Percopsidæ-

Percopsis guttatus, Agassiz. The Trout Perch, Sand Roller.

# Family Centrarchidæ—

Pomoxis sparoides, Làcepède. The Calco Bass.

Ambloplites ruprestris, Rafinesque. Green Rock Bass.

Micropterus dolomieu, Làcepède. Small Mouth Black Bass.

Micropterus solomides, Làcepède. Large Mouth Black Bass.

# Family Percida-

Stizostedion vitreum, Mitchell. Yellow Pickerel, Pike-perch or Doré. Stizostedion canadense griseum, DeKay. Grey Sauger or Pike-perch. Perce flavescens, Mitchell. The Yellow Perch. Hadropterus aspro, Cope and Jordan. Black-sided Darter. Hadropterus guntheri, Eigenmann and Eigenmann. Gunther's Darter. Boleosoma nigrum, Rafinesque. Johnny Darter. Boleosoma boreale, Starr Jordan. Northern Darter.

# Family Sciandia-

Aplodinotus grunniens, Rafinesque. Sheephead or Lake Drum-fish.

# Family Cottide-

Cottus pollicardis, Jordan and Gilbert. Olivaceous Miller's Thumb.

# Family Gadida-

Lota maculosa, LeSueur. Ling, Burbot, Lake Cusk, Losh and Methy.

### SPECIAL APPENDED REPORT-II.

THE MARINE AND FISHERIES COMMITTEE, AND THE LOBSTER INDUSTRY.

(By R. N. Venning, Superintendent of Fisheries.)

A very interesting and important factor in the working of the department, especially as affecting the Fisheries Branch thereof, consisted of the appointment during the year of a select standing parliamentary committee on Marine and Fisheries, thus providing a means hitherto inaccessible of investigating and discussing the various phases of the fisheries and the fishing industry as they might develop at different junctures in the general application of the fishery laws and regulations, and the exploitations of the fisheries.

It is felt that this move by parliament will have a very beneficial effect upon the welfare of the valuable fisheries assets of the Dominion in that it will bring them and their requirements as well as their possibilities, more prominently before the attention of the general public as well as of those who may desire to engage in their prosecution and development, and it cannot but have a tendency to greatly strengthen the hands of the department in its endeavour to enforce provident fishery laws and regulations, which, however beneficial and necessary, can never be considered as very popular, probably the least so of all restrictive measures having for their aim the conservation of great national assets.

Mr. John H. Sinclair, M.P., Guysborough, N.S., who had initiated the move during the session of parliament of 1908, moved in the House of Commons on the 3rd February, 1909 (*Hansard*, unrevised edition, p. 504), the following resolution:—

'That, in the opinion of the House it is advisable to appoint a select standing committee of the House to deal with questions relating to Marine and Fisheries as they arise from time to time, and the rules of the House be amended accordingly.'

Touching the question of the fisheries, Mr. Sinclair explained that the enormous coast line of Canada, with its prolific fisheries, as well as the great number of persons now employed in an immense industry, although only in its infancy and capable of enormous possibilities for adding to the wealth and prosperity of the country, called for a special committee which could devote its labour and research to the development of the fishing industry of the Dominion.

The mover of the resolution was followed by many members of parliament, who were unanimous in its support, and the Minister of Marine and Fisheries congratulated the several speakers, and intimated that a rule would be drafted and brought down for the adoption of the House.

Consequently on the 19th February last, the Hon. L. P. Brodeur moved the House into committee to consider a proposed resolution as follows:—

'That Rule No. 10, Chapter 2 of the Rules of the House of Commons, be amended by addding after the words "on Agriculture and Colonization" the words "on Marine and Fisheries," such being designed to carry into effect the decision of the House, on Mr. Sinclair's resolution as previously explained (Hansard unrevised edition, p. 1369), following which on February 26, the Right Hon. Sir Wilfrid Laurier, from the special committee appointed to report the lists of members to compose the select standing committees reported the composition of that on Marine and Fisheries as follows:—

Robert Bickerdike, Geo. H. Bradbury, Hon. L. P. Brodeur, A. W. Chisholm (Inverness), A. H. Clarke, (Essex), A. B. Crosby, John A. Currie (Simcoe), John W. Daniel, A. L. Fraser, Honoré Gervais, C. F. Jameson, J. W. Kyte, A. K. Mao-22—F<sup>1</sup>

lean, (Lunenburg), D. D. McKenzie, W. S. Middlebro, Frederick D. Monk, Bruno Nantel, F. F. Pardee, J. H. Sinclair, Ralph Smith, (Nanaimo), Hon. R. F. Sutherland, Jas. D. Taylor, (New Westminster), W. F. Todd, O. Turgeon, Hon. A. R. Warburton.

After preliminary arrangements were made by the committee, its first session to take evidence, under the Chairman, Mr. J. H. Sinclair, was held in this House of Commons, committee room No. 32, on Monday, March 8, 1909, the subject being the 'lobster industry,' and with the exception of two sessions, at which some evidence with regard to the oyster fishery and the fisheries of Georgian bay and adjacent waters were taken, every session up to the end of the fiscal year was devoted to full and comprehensive inquiries into the lobster industry, which indeed had not been nearly completed and bid fair to run well on to the end of the session of parliament.

### THE CANADIAN LOBSTER FISHERY.

It may not be inappropriate to refer briefly to the history of the lobster fishery of Canada.

About the year 1873, the fishery had assumed sufficient importance to attract more than ordinary attention. It was at that time prosecuted chiefly on the coasts of Nova Scotia and New Brunswick, where there were in the former province about 40 and in the latter about 24 canneries in operation. These are said to have used about 12,000 tons of raw material, and to have exported to the United States about 2,000 tons of canned lobsters, smaller quantities having been consigned to other markets. The value of the lobster catch cured in 1873 was \$1,214,749.50, while about \$120,000 worth were disposed of in a fresh state.

In view of the fact that excessive fishing had exhausted the lobster fishery along the north eastern coast of the United States, and that the enterprise therein embarked in had been transferred to Canada, the department was impressed with the necessity of some measures designed to protect and perpetuate the natural supply by some

economic regulations.

Thus the experience of the United States was sufficient to suggest some deterrent measures to avoid in Canada a repetition of conditions there. It was appreciated at the time that it was easier to exhaust a local asset such as the lobster fishery than it would be to revive it after the event. Hence the necessity for some timely precautions.

### LOBSTER FISHERY REGULATIONS.

This consideration of the matter was productive of the first fishery regulation touching the lobster industry that was ever adopted by the Governor General in Council by virtue of the authority of the Fisheries Act, and because it was the initial legislation in this regard, its substance is here extended. The order in council was dated July 7, 1873, and the essential part was as follows:—

'In the provinces of Quebec, Nova Scotia and New Brunswick no person shall at any time fish for, catch, kill, buy, sell or have in possession any soft shell lobsters or female lobsters with eggs attached; nor shall lobsters of a less weight than one and a half pounds be at any time fished for, caught, killed, bought, sold or had in possession; but when caught by accident in nets or other fishing apparatus lawfully used for other fish, young lobsters of less weight than one pound and a half shall be liberated alive at the risk and cost of the owner of the net or apparatus, or by the occupier of the fishery, on whom, in every case shall devolve the proof of such actual liberation.'

This was the signal for strong remonstrances from various quarters, the chief objections emanating from proprietors of canning establishments, because of the effect of the regulation in curtailing the supply of raw material which could, under the restrictions imposed, reach their canneries; nor was there any lack of objection on the

part of the fishermen.

Prominent among the remonstrances were petitions from western Nova Scotia; the reasons set forth being: (1) the majority of lobsters taken were under 1½ pounds weight; (2) the lobster, unlike the salmon, was not confined to any particular locality, but was a denizen of the vast ocean and not likely to decline; (3) the capture of these shell fish was to take wealth from the ocean and add to the riches of the country, which was no loss to the ocean owing to tremendous reproductive powers, and if not taken may never revisit the same place; (4) every average catch of lobsters was composed of ones less than 1½ pounds weight; (5) it would deprive those engaged of their livelihood and destroy a fast-growing industry; (6) a somewhat similar law recently became a dead letter in the United States.

These points were not difficult to deal with by any one who had given the subject any consideration since they were all in the line of special pleading, carrying with them their own answer.

The first objection, however, may be regarded as interesting inasmuch as it was

capable of verification or refutation.

The result was an inquiry into the question through the inspector of fisheries whose district embraced both provinces of Nova Scotia and New Brunswick. In the course of his investigations he addressed a letter to every fishery overseer in Nova Scotia and New Brunswick in whose district the fishery was pursued, asking him to give the average weight of lobsters taken in his jurisdiction.

The information elicited was as follows, and it is interesting to note that it demonstrates in the main that where the greater number of lobster canneries existed the

smaller was the average weight of the lobsters taken:-

### NOVA SCOTIA.

County. Halifax (East). Halifax (West). Lunenburg Queens Shelburne Yarmouth Digby Colchester Pictou Guysboro Antigonish	 $\begin{array}{c} 2\\ 2\frac{1}{2}\\ 2\frac{1}{2}\\ 2\frac{1}{2}\\ 2\frac{1}{2}\\ 2\frac{1}{2}\\ 3\\ 3\\ 5\\ 1\frac{1}{2}\\ \end{array}$	Number of Canneries.  8 and 2 more building.  3 3 and 2 more building.  7 1 None None 1 8
	 $\frac{1_{\frac{1}{2}}}{4}$ $\frac{3}{2}$	1 8 1 None 2 2

### NEW BRUNSWICK.

County.	Average	Weight		Number	of	Canneries.
Restigouche	0		3	TAMENOT	OI	Ominoi 103.
Gloucester			5			
Northumberland		3	4			
Kent		2	8			
Westmorland		3	None			
Albert		4	None			
St. John		4	None			
Charlotte		$2\frac{1}{2}$	4			

It is not to be forgotten that this is as far back as 1873, thirty-six years ago, and at the present time there can be found no such averages as those above mentioned; nor is it to be forgotten that in 1873 no less than 4,849,998 cans of lobsters were put up in Nova Scotia and New Brunswick against 10,911,498 in 1908 in the Atlantic provinces.

The inspector explained that the object of the regulation was to provide such a restriction as would effectively protect the fishery and at the same time interfere as little as possible with the work of the fishermen, and that had the object been simply to protect the fish he would have advocated a close season of sufficient length to cover the whole spawning or breeding season. He added that any fixed close time to be of service as a protective measure would need to cover July, August and September, and that such a close season would practically prohibit the business in some sections, particularly on the north shore of New Brunswick where the weather ordinarily prevents commencing before the last of May.

Following strong representations by a deputation of persons engaged in the lobster fishery, the Order in Council of July 7, 1873, was rescinded and replaced by an

Order in Council of April 23, 1874, which read as follows:-

In the provinces of Quebec, Nova Scotia and New Brunswick, no person shall during the months of July and August, fish for, catch, kill, buy, sell or have in possession any soft shell lobsters, or female lobsters with eggs attached, nor shall lobsters of a less size than nine inches in length, measuring from head to tail, exclusive of claws or feelers, be at any time fished for, caught, killed, bought, sold or had in possession; but when caught by accident in nets or other fishing apparatus, lawfully used for other fish, lobsters with eggs attached, soft shelled and young lobsters of less size than nine inches in length shall be liberated alive at the risk and cost of the owner of the net or apparatus, or by the occupier of the fishery, on whom, in every case, shall devolve the proof of such actual liberation.

The year previous, 1873, the legislature of the State of Maine passed the following law:—

'Section 1. No person shall catch, preserve, sell or expose for sale, within the limits of the State of Maine, any lobsters between the first day of August and the fifteenth day of October of each year; and from the said fifteenth of October to the first day of April next following of each year, no lobster shall be so caught, preserved, sold, or exposed for sale, under ten and one-half inches in length, measuring from one extreme of the body to the other, exclusive of claws or feelers; but from the said first day of April to the first day of August of each year there shall be no such restriction as to time or size, in the taking, preserving, selling or exposing for sale such fish.

'Section 2. Any person violating any provision of the above section shall be punished by a fine of ten dollars for every such lobster so caught, used, sold, or exposed for sale as aforesaid; one-half to the person making the complaint and one-half

to the use of the town in which the offence is committed.'

It may be here explained that the Fisheries Act, Chapter 45, of the Revised Statutes of Canada, empowers the Governor in Council to make regulations for the better management and regulation of the sea coast and inland fisheries, which shall have the same force and effect as if enacted therein, on publication in the Canada Gazette.

It is by virtue of this authority that the regulations controlling lobster fishing operations are framed.

The following is a short resumé of the various close seasons and other prohibitions from the beginning, bringing them down to the restrictions under which the lobster fishery is now conducted, and might be of interest here:—

1873.—There was no close season; but it was forbidden to take or possess soft-shelled and 'berried' lobsters, and those under one and a half pounds in weight;

1874.—The months of July and August were established as a close season, and a legal size limit of nine inches introduced. Other prohibitions retained;

1876.—The above close season was changed to from July 10 to August 20, and

the remainder of the maritime provinces. Other prohibitions retained;

1877.—Sectional close seasons introduced from August 1 to 31, for Nova Scotia, Prince Edward Island, and the southern coast of New Brunswick; and August 20 to September 15 for Quebec and the northern coast of New Brunswick. Other prohibitions retained;

1879.—Close seasons changed April 1 to August 1 for the western coast of Nova Scotia and New Brunswick; and April 20 to August 20 for Quebec, Prince Edward Island and the northern coast of New Brunswick. Other prohibitions retained;

1887.—Close seasons changed July 1 to December 31 for Atlantic coast from Cape Canso to United States' boundary line; and from July 15 to December 31 for the remainder of the maritime provinces. Other prohibitions retained;

1889.—Same dates as above continued; but the size limit was changed to nine

and one-half-inches. Other prohibitions retained;

1891.—No change in close seasons or other prohibitions; but the legal size limit

was put back to nine inches;

1893.—An experimental Order in Council was adopted for the province of Prince Edward Island providing that the two lowest laths of slats on each side of every trap should not be less than 11 inches apart. This was not found effective and was discontinued after 1894.

1894.—Regulations of 1891 unchanged; but lobster fishing was prohibited in the lagoons of the Magdalen islands, and the use of trawls for lobsters was prohibited in Gaspe and Bonaventure counties, in Quebec.

Before coming to the existing regultaions, a few remarks as to the sectional close

seasons may not be out of place.

The question of a uniform close season has beeen open to much argument in the past and the records of the department reveal that scarcely a season has passed without requests, based on geographical and climatic conditions in different districts,

for extensions of the open season.

Messrs. Frank Buckland and Spenser Walpole ['Report on Crab and Lobster Fishery of England and Wales, 1877'] on this point say; 'A universal close season is impracticable, because the season which would suit one part of the coast would be quite inapplicable to other parts;' and they consequently recommended empowering the Secretary of State to institute local close seasons in certain districts, with great caution and after careful inquiry. They made similar recommendations with regard to the lobster fishery of Scotland.

The evidence pointed to June, July and August as the months that should be closed against fishing, and the investigators said: 'It is worth observing that the three months of June, July and August, which the majority of witnesses thus indicate as the best close time for both crabs and lobsters, are precisely the months which the Act 9, George II, Chapter 33, section 4 enacts as the close time for lobsters.'

The foregoing resumé of close times reveals that as long ago as 1877, the necessity for sectional close seasons was recognized and admitted by Canadian legislation, and although changes have since been made in the dates and geographical divisions, the principle has not only been maintained; but greatly extended, inasmuch as at present there are no less than ten different close times.

It is perhaps a notworthy coincidence that the Canadian government should have in 1877, simultaneously with Messrs. Buckland and others, who reported in that year on the lobster fishery of England, Scotland and Wales, recognized the propriety and need of discriminating in the matter of close seasons according to the conditions and requirements of different localities.

In 1898 a commission was appointed to investigate and report upon the Canadian

lobster fishery, with a view to devising regulations designed for its betterment.

As a result of the report of this commission, a complete readjustment of the close seasons and size limits was effected by Order in Council, December 7, 1899 and April 8, 1903, and subsequent minor changes so that the regulations affecting the lobster fishery at present existing are:—

No. of District or Section.	LIMITS OF DISTRICT.	Close Season.	Size	limit.
1	Counties of Yarmouth, Shelburne, Queens, Lunenburg, and part of Halifax to Halifax Harbour, N.S.	June 1 to Dec. 14	9 in	ches.
2	Counties of Charlotte, N.B., and Digby, N.S.		9 111	ulies.
3	County of St. John, N.B.	June 30 to Jan. 5. *	9	
4	Bay of Fundy, part counties of Albert, N.B., Kings and			
_	Annapolis, N.S.	June 30 to Jan. 14.	$10\frac{1}{2}$	11
	From Halifax Harbour, including Guysborough County, to and through the Gut of Canso, then to Red Point, Richmond County		8	
6	Gulf St. Lawrence, comprising the Counties of Inverness, Anti- gonish, Pictou, Colchester and Cumberland in N.S., West- morland (see No. 7), Kent, Northumberland, Gloucester and Restigouche in N.B., and Bonaventure and Gaspé in			11
7	Quebec Excepting that portion of the Strait of Northumberland between N.B. and P.E.I., from Chockpish River to Cape Tormen- tine in N.B., and from West Point to Cape Traverse in	July 11 to April 19.	8	21
8	P.E.I  From Red Point, Richmond County, north to Cape St. Lawrence, comprising also Cape Breton and Victoria Counties, then in Saguenay County, P.Q., from Pt. de Monts east-	Aug. 11 to May 24.	8	**
	ward, Labrador, including Anticosti Island	Aug. 1 to April 30.	8	11
9	Around all the Magdalen Islands, P.Q., including Bryon and	July 11 to Aug. 31	8	11
		then from		
10		Oct. 1 to April 19. July 11 to April 26.		

<sup>\*</sup> Except in portion of Digby Co., fronting Bay of Fundy, where the size limit is 10½ inches.

These regulations are supplemented by the following prohibitions:-

- (a) The capture of soft-shelled and 'berried' lobsters.
- (b) The selling or offering for sale or barter, and the supply or purchase, for canning purposes, of any fragments of lobsters or broken meat.
- (c) The setting or placing of lobster traps, &c., within one hundred yards of any stationary salmon net.
- (d) The setting or placing of lobster traps, &c., in any waters of the depth of two fathoms or under.
- (e) The boiling of lobsters on board of any ship, vessel, boat or floating structure for canning purposes, except under special license.
  - Note.—Such licenses have never been granted.
- (f) The preparation for lobster fishing by placing gear of any kind before six o'clock of the morning of the day on which the legal season opens.
  - (g) Fishing for lobsters in the lagoons of the Magdalen Islands.
- (h) The use of trawls for lobster fishing in Gaspé and Bonaventure counties, Quebec.

The penalty for a breach of these regulations or any of them is provided by the Fisheries Act, as not exceeding one hundred dollars and costs or imprisonment not exceeding three months, accompanied by liability to confiscation of vessels, boats and fishing gear illegally used.

#### LEGISLATION TO CONTROL CANNERIES.

It was early recognized that the real difficulty in the way of proper protection to the lobster fishery was to be found in the canning phase of the industry, for although

no expedient presented itself, forming so important a factor in protection as the imposition of a size limit, leoking to the prevention of the destruction of the fish before the age of reproduction had been reached, it was nevertheless apparent that the conditions of the canning business admitted of, if not indeed effected the packing of everything large and small which came to the 'pots' or traps. Hence, without some machinery for the control of the canning operations, it was hopeless to expect any reasonable enforcement of a legal gauge, or indeed any other regulation designed for the protection of the fishery.

The same evil was not encountered where the trade was confined to live lobsters, because the article was not marketable unless of a reasonable and acceptable size, which made it in the interest of the fishermen as well as the trader to avoid capturing and placing on the market unsaleable lobsters, and these interests working in harmony with that of the lobster fishery, afforded, in a considerable measure, the assistance

nature required to keep up an equilibrium between the supply and demand.

The control of the canneries therefore became essential, and the first Canadian legislation in that direction was an amendment to the Fisheries Act—57-58 Victoria, Chapter 51—assented to July 23, 1894. It was, however, found to be too cumbersome, containing unnecessary provisions and details, and was, in the following year (1895) repealed, and the law at present in force—amendment 58-59 Victoria, Chapter 28, 1895—substituted in lieu thereof. This legislation forms sections 35 to 42 and 76 to 82 of Chapter 45 of the Revised Statutes of Canada.

For convenience it may be briefly epitomized as follows:-

Section 35. Prohibits the canning or curing of lobsters except under license from the Minister of Marine and Fisheries.

Section 36. Fixes the fee at \$2 per 100 cases, or fraction thereof, each to contain forty-eight one pound cans or ninety-six half pound cans.

Section 37. Forbids the removal of cases of canned lobsters from the canneries without being stamped with the government label.

Section 38. Provides that cases imported into Canada must be labelled or stamped with the government label.

Section 39. Imposes an annual return from each cannery by September 1 in each year, of number of fishermen employed, number of traps used, number of persons employed, distinguishing sexes, and number of cases packed, together with any other details which might be required from time to time.

Section 40. Imposes the obliteration and destruction of government labels on empty cases.

Section 41. Requires production of license on demand by a fishery officer.

Section 42. Imposes preservation and delivery to fishery officers, on request, all eggs attached to lobsters brought to the cannery.

Sections 76 to 82. Provides penalties for breaches of above provisions.

It will be observed that the above Act refers solely to the control of lobster canneries entirely separate and distinct from the regulations previously cited under which the lobster fishing operations are conducted.

#### APPLICATION OF THE REGULATIONS.

The three principal factors in the protection and perpetuation of the lobster fishery are:—(d) a proper close season; (b) the prohibition of the taking of 'berried' lobsters, and (e) a size limit. Each of these restrictions forms a feature in the Canadian regulations, whereas in the adjoining States they have been satisfied with a size limit, and have to some extent purchased 'berried' lobsters from the fishermen which they then liberated alive. This is somewhat in the line of the idea adopted by the department at the Gabarous pound. A strict enforcement of any of the above mentioned regulations, would go a long way to ensure the perpetuation of the lobster

fishery, but if it were possible to achieve a strict application of all of them there would

never be any fear of the permanency of the industry.

So far as the close season is concerned it may safely be said that there is comparatively little difficulty in its enforcement. The lobster canneries close at the advent of the prohibited season, and the traps are or should all be taken in. Those which are not being obviously illegally set, and comparatively easy of detection, can be seized and destroyed by the fishery overseers and patrol boats, which has a very deterrent effect upon illegal fishing since it means the total loss of the fishermen's gear. Thousands of traps have thus been destroyed by the officers when found illegally fishing and any lobsters therein liberated.

To the fact that this particular provision of the regulations is comparatively easy of enforcement is largely due the further fact that the lobster industry is not in a worse condition than it is to-day after about forty years of persistent exploitation from

the United States boundary line in the Bay of Fundy, to Labrador.

With the preservation of the 'berried' or seed lobster, however, the case is very different, these are captured along with the legal ones, by, say some 3,000 boats, operating and taken to about 700 canneries. Hence the chances of detection are very small and even if the department had a man stationed at every factory, its object in detecting the traffic in 'berried' lobsters could easily be defeated by the fishermen, were they so inclined, by the adoption of the method known as 'brushing' wiping,' or 'washing,' which simply means the removal of the eggs from the lobsters, to prevent detection, and throwing them overboard where they are just as effectually lost to the stock as if they had been boiled in the canneries with the lobsters from which they were taken. A further difficulty in the way presents itself is the fact that many of the boats do not land their own catches; but are visited by collecting smacks which receive the lobsters and transport them to the canneries.

It is only just to say here, however, that there are many evidences that the fishermen are fast becoming imbued with the necessity for the protection of the 'berried' lobsters, recognizing the enormous havoc wrought upon this source of their livelihood by the wanton destruction of an average of say 10,000 eggs with every 'berried' lobster they take to the canneries, and we hear from many quarters that at least locally there is concerted action among the fishermen to refrain from taking from the water such 'berried' lobsters as they find in their traps and to return them for reproduction purposes. It would be greatly in the interests of the fishermen, and all concerned should this feeling continue to grow bringing with it a higher appreciation of the provident protective measures conceived and promulgated in their own interests.

These two provisions of the regulations: the close season and the protection of the berried' lobsters occupy the position of being necessary restrictions acknowledged even by those whom they most affect and are therefore not arguable from a commercial standpoint or from that of expediency, but must be regarded as an essential to the permanence of the industry.

Passing to the size limit the conditions are wholly different, as this is the restriction which most affects the canner. The market regulates the size of the lobsters sold alive or boiled in the shell, 9 inches being the smallest which can legally be placed upon the adjoining markets in the United States, and 8 inches upon those of Canada. Hence it is obvious that these sizes will be the minimum which will find their way to such markets.

On the other hand so long as there is a good market for live lobsters in the United States, the canner—in localities where transportation makes the live traffic possible—finds himself unable to procure lobsters for his purposes except those under 9 inches, and as the legal sizes limits in Canada are 10½, 9 and 8 inches, it will readily be seen that the canner is necessarily restricted in his supply of raw material. The result is inevitable and it goes without saying that large quantities of lobsters under 8 inches and therefore illegal have found their way into the pack of the canners.

The above explanations as to the difficulty in effectively enforcing the provision regarding 'berried' lobsters gain force when applied to the application of the size limit.

Considerable diversity of opinion exists as to the necessity for a size limit for lobsters. It is generally admitted for all practical purposes that the average female bears extruded eggs at about 9 to 91 inches in length. Some have been observed smaller than this but they are said to be exceptional and therefore of little value in aiding the establishment of a proper legal size limit. The theory of such a limit is that the creature should be permitted to reach maturity which must be regarded as the size when it first bears extruded eggs and therefore capable of reproduction. Dr. Field, of the Massachusetts Fish Commission, has advanced the idea of permitting all lobsters, say from 9 to 10½ inches to be taken, protecting both the smaller and larger ones, by prohibition. His theory as the writer understands it is that the lobster of commerce in the United States is the lawful one from 9 inches up. Added to this is the fact that those most in demand are regulated by the epicurean taste of the frequenters of hotels and restaurants and range from say 9 to 10½ inches. Since the production of eggs largely increases with the increasing size of the lobster he would save all those over 101 inches because the progeny of one large lobster of say 16 inches would be of more benefit to the stock than that of four or five 102-inch lobsters. Thus he would save the immature as well as the large brood lobsters leaving to the catcher, dealer and consumer the size best fitted for the market and most sought after.

The writer has had more than once put to him the argument that as it was impossible to kill all the small lobsters at once, the taking of the small ones was less destructive than generally believed, and that the taking a single brood female did more immediate harm to the stock than the capture of thousands of small ones. The

latter part of this idea is in consonance with the theory of Dr. Field.

It must not be lost sight of, however, that Dr. Field was dealing with conditions wholly at variance with those existing in Canada. So far as the writer knows, there is not one lobster cannery in the United States, while there are about 700 in Canada,

presenting conditions which must be met.

It has been explained early in this paper that the real difficulty in dealing with the lobster question was born of the introduction of the canning phase, and it has developed with it. The lobster canning business is a great maritime province industry, producing in 1908 10,911,498 cans, valued at \$3,273,447, while the live lobster trade produced 98,373 hundred weight, valued at \$926,832. The question, therefore, arises as to whether regulations for the protection of the lobster fishery should be sufficiently drastic to seriously cripple, or in many instances automatically close the factories, with attendant effects upon the communities where they are operated.

The department realizing that for some time past no real concerted attempts were made by the canners and fishermen to observe the size limit, and that the fishery officers had not been able to properly enforce the law in this particular regard, and the statement having been made that a strict enforcement of the size limit would have the effect of closing the lobster canneries, by reason of the fact that a sufficient number of legal sized lobsters could not be secured to operate with profit, the writer was delegated to visit the maritime provinces in October, 1907, and inquire into this specific point, by conference with inspectors and fishery overseers of the several provinces.

In order that the inquiry might be as thorough as possible, he arranged meetings with the officers at Halifax and Port Hawkesbury, N.S., Charlottetown, P.E.I., and Moncton, N.B. He took with him to each meeting the inspectors of fisheries of the three provinces to enable them to observe the general conditions obtaining outside as well as within their own districts. At Halifax two inspectors of fisheries and fourteen fishery overseers, representing the counties of Halifax, Lunenburg, Queens, Shelburne, Yarmouth, Digby, Annapolis and Kings, were consulted and examined; at Port Hawkes-

bury two inspectors of fisheries and nineteen fishery overseers, representing the counties of Cumberland, Colchester, Pictou, Antigonish, Guysborough, Richmond, Cape Breton, Victoria and Inverness, were likewise consulted and examined; at Charlottetown one inspector of fisheries, one assistant inspector and three fishery overseers were similarly dealt with, and at Moncton one inspector of fisheries and eleven fishery overseers were also consulted and examined.

Although the object of the inquiry was to glean all possible information from the officers of the department as to the actual state of affairs with regard to the observance of the size limit for lobsters, no opportunity was lost to obtain information from outside sources should any interested persons desire to afford the same. Consequently at Halifax, by request, the writer met at the Board of Trade rooms eight gentlemen interested and discussed the question with them. Again at Mulgrave, leaving Port Hawkesbury, he obtained the views of two other gentlemen interested in the matter. Also at Moncton he was waited upon by three gentlemen who were all lobster packers, who were desirous of giving their views.

In this way the ground was very fully covered and as the scope of the inquiry

was limited and specific the information was thoroughly reliable.

Up to this time the evident disregard of a proper observance of the size limit was attempted to be explained by the packers and fishermen from their own standpoints, each naturally endeavouring to cast the onus upon the other. The fishermen held that if the packers would not take the small lobsters they would not bring them in; while the packers' contention was that they were in the hands of the fishermen, and if they did not take them as they came large and small, they could not get any to pack, as some one could always be found who would take small lobsters, if mixed with the legal ones.

The information gained in the course of the inquiry above explained could lead to only one conclusion, as it made it quite clear, that—with the exception of a few spasmodic attempts and the earnest endeavour of some energetic officers, in certain districts—practically around the whole coasts of the maritime provinces where canning operations are carried on, there has been an absence of any regularly concerted attempt either to comply with or to strictly enforce a close observance of the size limit—although from the trend of the evidence which was to some extent incidental to the inquiry it would seem that the regulation requiring the liberation of 'berried' lobsters was being enforced with more or less success.

When the 9-inch limit was adopted by Canada in certain sections lobsters under 10 inches were illegal in the Boston market, and it would therefore seem that the object of placing the limit at 9 inches was to enable the canners to obtain all lobsters between 9 and 10 inches; as it would not pay to can such as could be sold alive. Since that time a change in the Boston law has been made whereby 9 inch-lobsters are legalized on the market. The effect of this change on the packers west of Halifax is to practically take from them all lobsters down to 9 inches and if canning is to be permitted to continue there at all, there would appear to be no good reason, under the changed conditions, for a different size limit than obtains east of Halifax—that is 8 inches.

The preponderance of opinion developed at the inquiry was to the effect that in many cases a strict enforcement of existing size limits would, if not entirely close up the canneries, so cripple them as to make it unprofitable to continue operations.

The view held by the canners to-day seems to be that if they are obliged to render a strict observance of the size limit they cannot proceed with the prosecution of the industry.

If upon investigation which will doubtless follow the work of the newly constituted parliamentary committee on Marine and Fisheries, it be found that this view is even approximately correct we will find ourselves forced to face an alternative difficult to deal with.

This view of the matter is not a new one, and it is interesting to note that during the inquiry of 1873, referred to in previous pages, Dr. S. P. Reid, of Halifax, writing 36 years ago to the Commissioner of Fisheries, said:

'Lobster canning is now an important industry and factories exist all along the Atlantic coast from Cape Breton to Cape Sable. It is desirable that no undue restriction should be placed on it, but it is none the less necessary that regulations be adopted that will tend to maintain its continuance.'

The Inspector of Fisheries for Nova Scotia and New Brunswick, who at the time, was investigating the complaints against the original regulation in 1873, said: 'Were the object simply to protect the fish without regard to the fishermen and preservers (canners), I should have urged an absolute close-time sufficient to cover the whole spawning season. But, as before stated this would in some localities practically prohibit the business.'

Here is the testimony of the late Lieut. A. R. Gordon, R.N., on this point, written in the year 1889, twenty years ago, when officer in command of the fisheries protection

service:-

'The present regulations in regard to size limit and the destruction of females carrying exuded ova are intended as protective measures and are without doubt protective enactments; but the question arises how far the enforcement of these enactments is possible with the existing means at the command of the department and the still wider question as to whether the enforcement of the regulations is compatible with the existence of the industry. I consider the fact undeniable that taking the Gulf of St. Lawrence district if the above quoted regulations were strictly enforced not one single packing factory could run for one single day, and if the packers, whose interests and desire it undoubtedly is to maintain this fishery, were to attempt to enforce the law, the fishermen would directly reply that they could not make a living at fishing with adherence to those regulations, and therefore could not fish for the packers. The rigid enforcement of the existing regulations is therefore tantamount to the closure of the factories and would in practice have the effect of diverting the business from the hands of responsible citizens who are now engaged in it to those of fishermen of small means, who would get their supplies of cans from the merchants and by boiling the lobster in their houses and barns render it almost impossible to exercise any control whatever over them, and if those men were caught breaking the law the whole property which could be seized would probably be insufficient to pay the fine and the alternative of imprisonment would have to be inflicted.

The history of restrictive legislation of this nature has been everywhere the same in every country where enacted. It has failed to protect the fish and it is worthy of consideration whether shorter seasons for packing and the aid of artificial propagation may not attain in a greater measure the desired end, viz. the increased productiveness of the fishery without the actual stoppage of an important industry.

The shortened season coupled with the reduction in the number of factories, has already to a perceptible extent benefited the fishery and from the information given me I am led to believe that the lobster catch for the season of 1889 will show in the gulf a marked increase over that of 1888 and further whether the result be due to the mild winter or to the legislative enactments of the close seasons the fact is stated that in the early part of the season the run of lobsters averaged larger than they had done for some years—that is to say, that the packers reported that fewer lobsters were required to fill a can than formerly.'

Whether or not the size limit, the object of which would appear to be to protect the lobster until it has reached a reproducing size and age is conceived on proper grounds or adequate knowledge, seems to be an open question, but if it be ultimately decided that such method is the best which can be devised to effect efficient protection, the information at the disposal of the department points strongly to the conclusion that such limit should not be less than 8 inches.

It seems to be quite within the possibilities that it may be expedient and indeed in the general interest having regard both to the lobster fishery and to those exploiting it, to abandon the size limit altogether and lengthen the close-season so as to admit of the minimum amount of fishing consistent with a reasonable prosecution of the fishery. This together with a strict enforcement of the prohibition of the capture of 'berried' lobsters, and of the close-season under more severe penalties such as cancellation of licenses is not unlikely to achieve better results than hitherto and ensure the continuance of the fishery in a productive state.

#### UNITED STATES FIRMS ENGAGED IN LOBSTER CANNING IN CANADA.

Incidentally reference has already been made to the advent of the New England lobster canners to Nova Scotia and New Brunswick. It appears that about forty years ago the excessive fishing and canning of lobsters on the north eastern coast of the United States, had exhausted the fishery there and the capital invested in the enterprise was transferred to those provinces by the United States firms which in changing the base of their operations became practically the pioneer lobster canners of Canada.

At this time there was no question of any diminution of the lobster fishery, nor were there any regulations governing the same. There was a practically virgin fishery awaiting exploitation, and the people even hailed with pleasure the advent of the foreign capital and operator because of the employment given, the market for the catches and the general benefit accruing to the community from the establishment of a new industry in its midst with its attendant incidental advantages.

In a report by the late Prof. J. F. Whiteaves, of deep sea dredging operation in the Gulf of St. Lawrence (Appendix N, Department of Marine and Fisheries, 1873, p. 196), he speaks of the market for lobsters in the United States and Europe and says:—'In spite of their increased commercial value it is nevertheless a fact that in some of the northern parts of the gulf good marketable lobsters are used to manure the field.' And again, quoting from an informant, Mr. W. S. Brown, Shippegan, N.B., he says:—'The heavy gale of last August drove more lobsters ashore within five miles of my packing houses than I could make use of during the whole summer. They formed a row of from one to five feet deep and I should estimate them at an average of one thousand to every two rods of shore. The next that came in shore after these were very small, averaging from two to four inches in length and upwards and the coast seemed alive with these small lobsters.'

In a report for 1873, the Inspector of Fisheries for Nova Scotia and New Brunswick, said:—'By far the largest canning establishments now in operation in Nova Scotia are carried on by Americans, who buy by tale or weight from resident fishermen.'

It must also be remembered that there was neither restriction nor license system at the time these people established themselves in a business which was free and open to all. From that time forward they and their successors have continued to operate lobster canneries in Nova Scotia, New Brunswick, Prince Edward Island and Quebec.

When in 1894, the license system was inaugurated by legislation these canners as old operators of some twenty years standing, received licenses which have since been renewed and augmented.

At the end of the year 1908, the following licenses were held by United States firms in Canada.

8

# SESSIONAL PAPER No. 22

STATEMENT of Lobster Canneries operated by United States firms in the Dominion of Canada during the year 1908, by Provinces and Counties.

# PORTLAND PACKING Co., PORTLAND, MAINE.

PORTLAND FACKING CO., I ORIDAND, MAINE.		
Province of Nova Scotia.		
Antigonish County—Nos. 156 and 157		2 3
Province of New Brunswick.		5
Westmorland County—Nos. 462 to 466		5
Province of Prince Edward Island.		
Prince County—Nos. 501 to 504 and 601, 602 and 603 Queens County—Nos. 572 and 573		7 2
		9
Province of Quebec.		
Gaspé County—Nos. 739 and 740····································		2
Burnham, Morell Co., Portland, Maine.		
Province of Nova Scotia.		
Antigonish County—Nos. 79, 80, 114 and 115.  Cape Breton County—Nos. 227 and 242.  Cumberland County—Nos. 86 and 87.  Guysborough County—Nos. 88, 104 to 113.  Halifax County—Nos. 101 to 103.  Inverness County—No. 252.  Pictou County—Nos. 81 to 85.  Richmond County—No. 235.	• •	4 2 2 11 3 1 5 1
Province of New Brunswick.		
Charlotte County—No. 304		1
H. C. Baxter & Bro., Brunswick, Maine.		
Province of Nova Scotia.		
Cape Breton County—No. 250  Guysborough County—No. 117  Inverness County—Nos. 240 and 241  Richmond County—Nos. 230, 231, 259  Victoria County—No. 249		1 2 3 1

# H. L. FORHAM, PORTLAND, MAINE.

30.	0	27	~
Province	ot	Nova	Scotia.

Province of Nova Scotia.	
Guysborough County—No. 176	
•	4
Province of Quebec.	
Bonaventure County—No. 715	1
D. W. Hoegg & Co., Portland, Maine.	
Province of New Brunswick.	
Gloucester County—No. 374	
Province of Quebec.	4
Bonaventure County—Nos. 721, 722, 723	
	4
Snow Flake Canning Co., Brunswick, Maine.	
Province of Nova Scotia.	
Cape Breton County—No. 269	1
RECAPITULATION.	
PORTLAND PACKING CO., PORTLAND, MAINE.	
Nova Scotia.  New Brunswick.  Prince Edward Island.  Quebec.  Total.	5 9 2
Burnham & Morell Co., Portland, Maine.	
Nova Scotia.  New Brunswick.  Total.	
H. C. Baxter & Bros. Brunswick, Maine	Canneries.
Nova Scotia	

H. L. Forhan, Portland, Maine.		
Nova ScotiaQuebec		4
Total	• •	5
D. W. Hoegg & Co., Portland, Maine		
New BrunswickQuebec		
Total	•••	6
Snow Flake Canning Co., Brunswick, Maine.		
Nova Scotia		neries. 1
A total of 71 canneries.		

#### LOBSTER HATCHERIES.

The question of the artificial hatching of lobsters has engaged the attention of the department for years; but up to the present time the practical operations have not been pursued quite to the same extent as in the case of other fisheries, although great demands are being made upon the department to augment the number on all parts of the Atlantic coasts and greater strides are being made in the direction of lobster hatching, extended arrangements for which are now being pushed with increased vigour. The report of Mr. F. H. Cunningham, superintendent of fish culture, forming Appendix 13 to the annual report will give full details with regard to lobster hatcheries.

Some initial experiments were made on a slight scale in the introduction of floating incubators, which did not meet with a sufficient measure of success to induce any extended operations.

As far back as 1891 a lobster hatchery was established at Bay View, Pictou county, Nova Scotia, which has been successfully maintained and operated since that date, to the entire satisfaction of the department. This was the pioneer lobster hatchery of Canada.

#### IMPOUNDING AND SUBSEQUENT LIBERATION OF SEED LOBSTERS.

In connection with efforts to maintain the supply of lobsters by methods of artificial propagation and protection of the breeding fish, an interesting experiment was begun in 1903 at Fourchu, Cape Breton county, Nova Scotia, under the auspices of the Department of Marine and Fisheries.

An arrangement was made with Mr. H. E. Baker, of Gaborous, a large operator in the canned and live lobster trade in Cape Breton Island, for the utilization of his lobster pounds at Fourchu, which were partitioned off for the reception of lobsters of different classes and in different stages.

The principle of the scheme was to purchase from the fishermen 50,000 desirable seed lobsters, and place them in a suitable pound for protection, where they could be retained and fed during such time as fishing operations were proceeding, after which, or when the eggs were sufficiently advanced, the lobsters were to be liberated along the coast whence they were taken, thus permitting such of them as had not already cast

their fry in the pounds, to hatch their eggs in their natural haunts, in conformity with the strict methods of nature.

A specialist of the department was sent to inspect the working of the scheme, and August 5 of that year he reported that the eggs were hatching out in millions within the enclosures of the pounds, and the young lobsters were making their way through the wire netting into the sea. At the time of his visit there were still in the pound about 20,000 'berried' lobsters, the eggs of which were in various stages of development, while the enclosure was teeming with vigorous, newly hatched fry.

In accordance with the arrangement 49,769 seed lobsters, from the pounds, were delivered alive, in healthy condition, to the fishery officers authorized to receive the same, and were conveyed to the localities from which they were taken by the fisher-

men, where they were liberated to complete their procreative functions.

The success of the initial years operations as detailed above warrants the department in continuing the arrangement from year to year up to the present time, and many applications have been received for the inauguration of similar pounds in other localities, but the department so far has extended its hatcheries where conditions were favourable leaving the question of the extension of lobster pounds for future consideration.

#### LIMITATION OF CANNERIES.

The rapid increase in the number of canneries operated called for the exercise, by the government, of some restraint upon their multiplication, as well in the interest of the canners themselves as in that of the preservation of the fishery, and when it transpired that a maximum number of canneries reasonably allowable in given districts, compatible with profitable results and rational protection, had been reached, the department refused to increase the number of licenses, without which no cannery may be operated.

Broadly stated, then, the policy of the department, in congested localities, where limitation is obviously necessary, has been to restrict the business to the canneries

already established.

There are sections of the coast, however, in the more remote regions, where the same reason for so drastic a policy does not obtain, and after careful investigation into the conditions and requirements of such districts, new establishments may be authorized if no obstacles intervene.

The controlling power thus afforded emphasizes the expediency and wisdom of applying the license system to the canneries instead of to the actual fishing operations,

as is the case in all other fishery licenses on the Atlantic coasts.

Influenced by the high prices for canned lobsters for the past few years, numerous complaints have been made against the policy of refusing new licenses, principally on the grounds that it created a practical monopoly and enable the canners to control the price to be paid to the fishermen for the raw material which they must necessarily accept being unable without license to can their own lobsters; also that in some instances canners refused to pack the lobsters offered by the fishermen. These cases having been carefully inquired into, the minister decided that if a number of lobster fishermen, not less than fifteen, formed themselves into a co-operative association to can their own lobsters caught by them and agreed to share alike in profits or loss, then a license would be granted them or one of their number named by them, but subject to cancellation and not to be renewed if not used in accordance with the agreement.

During the past two seasons several such co-operative licenses have been issued, thus removing the appearance of monopoly.

# EXISTING CONDITION OF FISHERY.

For many years past much has been said and written about the woeful depletion of the lobster fishery, and the facility with which the utter extinction of this valuable

crustacean, has been predicted is somewhat remarkable in the face of the facts. To say the least these pessimistic views have been based on insufficient information of the conditions obtaining, and cannot find sanction in the event.

It does not seem that the lobster fishery is anything like destroyed, nor would it seem that its destruction is within measurable distance. One cannot fail to appreciate that probably the time has come when most persistent efforts should be made to see that the condition of the fishery instead of deteriorating or standing still, should progress which probably can be done through the medium of regulations perhaps better designed to suit existing conditions, than may be those which resulted from a commission of inquiry into the industry of eleven or twelve years ago; but that the fishery is a thing of the past and that we have now to adopt excessively drastic measures to rehabilitate it, it is submitted, has not been demonstrated:

Let us examine the statistics of the industry for the past twelve years, which embrace those for the year previous to the regulations consequent on the recommendations of the Commission of Inquiry of 1898, which are as follow:—

#### Lobsters canned and sold in the shell.

#### BAY OF FUNDY.

Year.	St. J	ohn.	Anna	polis.	Kií	igs.	Tot	al.
	1 lb. cans.	cwts in shell.	1 lb. cans.	cwts in shell.	1 lb. cans.	cwts in shell.	1 lb. cans.	cwts in shell.
1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908		6,390 5,980 6,080 12,215 2,114 2,310 1,848 22,485 31,884 41,824		1,535 1,515 1,838 895 1,545 2,448 362 485 1,560 6,004		248 500 641 810 760 854 678		5,373 8,112 7,495 7,918 3,358 4,159 5,399 3,020 3,730 4,298 8,506 8,280
Totals		38,998		25,273		5,377		70,648

<sup>&</sup>lt;sup>1</sup>100 cwts from Albert Co. <sup>2</sup>200 cwts from Albert Co. <sup>3</sup>300 cwts from Albert Co. <sup>4</sup>400 cwts from Albert Co.

#### DIGBY AND CHARLOTTE.

Year.	Dig	by.	Charl	otte.	Tot	al.
1897	1 lb. cans.	shell.	1 lb. cans.	snen.	1 lb. cans.	cwts in shell. 128,991
1898	29,424 27,408	223,222	108,072 105,696			235,988 31,919
1899 1900	48,500	51,165	99,552	9,539	148,052	60,704
1901 1902	129,735 $123,510$		109,440 68,676	8,732 8,654		75,823 27,361
1903	131,226	19,681	99,800 38,200	7,180 7,324		26,861 29,056
1904 1905	186,614	19,100	90,240	9,775	276,854	28,875
1906 1907	172,464 153,298		80,236 $54,412$			17,918 14,922
1908	167,584		31,968	5,362		13,478
Totals	1,318,411	581,812	988,196	110,084	2,306,607	691,896

#### SOUTH WESTERN COAST OF N.S.

Year.	Lunen	burg.	Que	ens.	Shelbu	arne.	Yarm	outh.	Total	
1897	1 lb. cans. 136,784 148,128 125,448 154,640 118,086 135,775 122,032 117,670 103,280 124,460 140,608 139,776	cwts in shell.  11,475 1,053 704 545 531 643 1,122 1,151 1,496 1,906 2,160 1,123	146,880 89,276 137,472 83,506 193,968 164,880 91,920 116,160 141,000	3,616 3,257 30,100 30,750 680 1,310 2,834 2,700 3,245 4,695 3,393	439,968 294,860 434,512 625,794 543,370 547,344 621,562 618,662 610,316 645,458 573,008	9,850 44,562 12,970 12,580 31,565 24,556 11,047	1 lb. cans. 529,036 653,976 676,000 677,000 617,800 1,027,200 986,736 907,968 807,520 689,660 597,936	18,100 16,690 17,451 17,650 34,320 30,000 31,892 20,000 22,100 31,200 33,883	1,402,536 1,247,188 1,351,428 1,499,152 1,789,851 1,850,080 2,026,880 1,783,190 1,634,216 1,591,886	69,530 96,576 58,781 80,205 45,402 48,457 55,761 51,807 49,092

# SOUTHEASTERN COAST NOVA SCOTIA AND CAPE BRETON.

Year.	Hali	fax.	Guys	boro.	Richn	nond.	Tot	al.
	1 lb. cans.	cwts in shell.	1 lb. cans.	cwts in shell.	1 lb. cans.	ewts in shell.	1 lb. cans.	cwts in shell.
1897	537,552	12,197	933,572	1,140	406,148]	98	1,877,272	13,435
1898	590,352	18,063	915,956	811	368,530	552	1,874,838	19,426
1899	473,384	13,073	825,936	2,282	348,622	3,641	1,647,942	18,996
1900	480,520	9,222	901,028	3,930	406,152	3,308	1,787,700	16,460
1901	440,784	12,842	672,240	3,168	324,284	902	1,437,308	16,912
1902	416,854	12,305	588,496	2,392		2,883	1,195,320	17,580
1903	432,624	9,563	543,196	2,673		1,344	1,230,980	13,580
1904	453,624	13,810		2,009	270,152	1,283	1,257,628	17,102
1905	407,380	21,541	494,500	9,895		2,158	1,139,398	33,604
1906	379,632	7,141	487,220	2,551		2,176		11,868
1907	322,488	11,297	401,848	3,429	119,678	587		15,313
1908	363,360	3,709	402,116	3,600	164,880	496	930,356	7,805
Totals	5,298,554	144,783	7,699,960	37,900	3,242,750	19,398	16,241,264	202,081

# EAST COAST CAPE BRETON.

Year.	Cape F	Breton.	Vict	oria.	Tot	tal.
	1 lb. cans.	cwts in shell.	1 lb. cans.	cwts in shell.	1 lb. cans.	cwts in shell.
1897	492,552		176,664		669,216	
1898	413,308	4,000	134,516		547,824	4,000
1899	477,072	23,066	120,436		597,508	
1900	586,512	2,157		90	730,728	
1901	430,720	959		11	553,280	
1902	188,980	1,376			279,344	
1903	325,256	5,945		81	502,270	
1904	389,366	2,912		70	605,678	
1905	224,740	15,035		4,061	387,880	
1906	234,608	10,422			371,816	
1907	212,656	2,631		27	319,300	
1908	271,280	2,175	93,456	23	364,736	2,198
Totals	4,247,050	70,678	1,682,530	4,524	5,929,580	75,202

# Lobsters canned and sold in the shell. STRAIT COAST NOVA SCOTIA.

SESSIC	NAL PA	PER No. 22
	al.	cwts, in shell.  198 24 410 610 910 910 910 910 910 910 910 910 910 9
	Total.	1 lb. in cans. 1,514,188 1,515,672 1,315,326 1,345,424 1,345,424 1,345,424 1,249,179 1,431,156 1,345,692 1,438,156 1,348,612 1,348,812 1,361,828 1,485,214 16,616,135
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ness.	shell. 33 1,441 1,441 1,441 1,535 1,5460 1,535 1,535 1,5477
Large State of the Control of the Co	Inverness.	1 lb. in cans. 298,872 298,872 299,256,257,756 250,864 220,864 220,872 329,497 329,497 329,497 329,497 329,497 329,497 329,497 329,497 329,497 329,497 329,497 329,497 3316,941
	onish.	owts, in shell.
ne shell. TIA.	Antigonish.	in in 5,000,000,000,000,000,000,000,000,000,0
sold in the	on.	cwts, in shell. [65] [10] [10] [10] [10] [10] [10] [10] [10
Lobsters canned and sold in the shell. STRAIT COAST NOVA SCOTIA.	Pictou.	shell, cans. shell, cans. shell, 495,816 165 207 164 17,236 165 207 164 17,236 150 138 150 138 138 138 139 139 128 150 138 150 138 150 138 150 138 150 138 150 138 150 138 150 138 150 138 150 138 150 138 150 138 150 138 150 150 150 150 150 150 150 150 150 150
bsters ca	ester.	shell.
L	Colchester.	11b. in cans. 20,688. 20,688. 20,688. 36,722. 36,722. 38,722. 38,722. 38,5480. 38,480. 38,480. 38,576.
	rland.	cwts, in shell.  24  72  72  74  40  38  31  31  11  11  11  11  11  11  11
:	Cumberland.	1 lb. in can 490,952 505,524 489,168 399,064 488,352 447,648 402,218 463,296 363,792 463,295 5,372,184
	YEAR.	1897 1898 1899 1900 1901 1902 1905 1906 1906 1907 Totals

YEAR.	Restigouche.	a <sup>3</sup>	Gloucester	ster.	Northumberland.	berland.	Kent.	ıt.	Westmorland	rland.	Totals,	ls.
1897. 1899. 1899. 1901. 1902. 1903. 1904. 1906. 1906.	11b. in cans.  37,400 22,550 22,600 22,600 22,600 22,000 11: 27,000 11: 27,000 11: 38,000 28,	1, in 360 220 220 235 1, 080 1, 080 1,475 250 260 260 260 260 310 310	1 lb. in cans. 1,351,400 692,000 618,020 618,020 707,120 7792,940 877,000 847,000	cwts, in shell. 570 650 650 655 640 875 1,150 1,150 1,223 1,150 1,220 1,150 1,100 1,100	1 lb. in cans. 118,000 118,000 175,200 93,600 775,500 123,500 124,600 194,800 200,000 211,000	cwts, in shell.  130 200 270 270 270 280 280 400 400 400 400 400 270 280 280 280 280 280 280 280 280 280 28	1 lb. in cans. 444,100 462,600 443,110 448,110 448,110 448,110 441,904 441,904 441,904 688,500 583,300	cwts. in shell. 2305 2500 4500 4500 25000 4500 255000 25500 25500 25500 25500 25500 25500 255000 255000 25500 2550000 25500 25500 25500 25500 25500 25500 25500 25500 25500 25500 25	1 lb. in cans. 400,000 500,000 500,000 788,320 744,800 7744,800 7744,800 774,800 774,800 774,900 601,000 623,000 869,200 1,000,500	cwts. in shell. 1,420 1,420 1,230 2,500 4,300 1,700 1,700 1,700 1,700 1,700 1,450 880	1 lb. in cans. 2,311,500 2,005,150 2,005,150 1,989,140 1,986,620 1,896,620 2,036,872 2,016,300 2,159,200 2,340,624 2,546,620 2,340,624 2,566,000 2,686,000	cwts. in shell. \$2,620
Totals	387.622	6,460	6,460 10,069,400	10,795	1,659,000	3,240	4,996,974	10,810	8,758,920	30,150	25,871,916	61,455

# MAGDALEN ISLANDS AND QUEBEC.

Year.	Magdalen	Islands.	Gasr	pé.	Bonave	enture.	North S	Shore.	Tota	ls.
According to the second	1 lb. in cans.	cwts. in shell.	1 lb. in cans.	cwts. in shell.	1 lb. in cans.	cwts. in shell.	1 lb. in cans.	cwts. in shell.	1 lb. in cans.	cwts. in shell.
1897	703,656		226,552		64,666				1,036,202	
1898	612,290				89,520				1,067,058	
1899					92,628				1,059,658	
1900					91,930				1,022,106	
1961					72,936					
1902				10	63,972		146,992			
1903			104,004		60,300 $46,770$				978,434 $848,634$	
1904					72,370	183				
1905					54,624		89,777		798,800	
1907					62,592				819,723	
1908					45,525		60,599		696,476	
Totals.	7,218,984		1,489,582	103	817,833	1,188	1,482,293	125	11,008,692	1,416

#### PRINCE EDWARD ISLAND.

Year.	Ki	ngs.	Que	ens.	Prin	nce.	Tota	als.
	1 lb. in cans.	cwts. in shell.	1 lb. in cans.	cwts. in shell.	1 lb. in cans.	cwts. in shell.	1 lb. in cans.	cwts. in shell.
897	775,236		508,005		1,183,441		[2,466,682]	
898	642,944		546,776	39	1,150,300		2,340,020	
899	778,260		545,948	12	1,096,936	34		4
900	716,448		499,804	75	1,007,460	60	2,223,712	
901	751,692		520,992		1,113,386			35
$902\ldots\ldots$	754,368		484,944		800,291	134		
903	903,024		557,952		874,424			40
904	1,024,656		606,234	1,500	870,210		2,501,100	1,53
905	931,248		742,624	50	508,752		2,182,624	350
906	914,496		482,064		892,728	90	2,289,288	
907	1,027,008		674,544		1,137,937	420	2,839,489	720
908	1,120,416		647,568	510	1,330,460	20	3,098,444	53
Totals	10,339,796		6,817,455	3,211	11,966,325	1,273	29,123,576	4,48

# Lobster Canneries and Traps. BAY OF FUNDY.

	St.	John.	Anr	napolis.	К	lings.	$T_0$	otal.
${f Y}{ m ear}.$	Canneries.	Traps.	Canneries.	Traps.	Canneries.	Traps.	Canneries.	Traps.
1897 1898 1899 1990 1901 1902 1903 1904 1905 1906 1907		5,090 5,050 119,650 25,425 34,905	2	11,755		1,192 1,252 1,722 1,875		18,825 17,200 16,750 17,900 15,472 15,341 13,954 11,742 20,902 16,547 18,535 20,135
Totals		105,570	2	86,905		10,828	2	203,303

<sup>&</sup>lt;sup>1</sup> 200 in Albert Co.

# DIGBY AND CHARLOTTE.

		1				
	D	igby.	Cha	rlotte.	Т	otal.
Year.	Canneries.	Traps.	Canneries.	Traps.	Canneries.	Traps.
1897 1898 1899 1900 1901 1902 1902 1904 1905 1906 1907 1908	4 7 11 9 8 11 10 10 11 12 15 16	34,029 35,470 35,210 34,105 36,548	8 7 12 7 9 5 4 4 4 4 4 4 4	24,192 23,059 17,702 19,461 20,620 18,189 17,179 18,900 6,476 18,586 19,746	15 18 21 15 20 15 14 15 16 19 20	48,892 54,169 46,587 49,735 55,731 47,309 51,555 52,929 41,946 53,796 53,851 56,163
Totals	124	388,938	75	223,725	199	612,663

<sup>&</sup>lt;sup>2</sup> 300 in Albert Co. <sup>3</sup> 300 in Albert Co.

<sup>4500</sup> in Albert Co.

9-10 EDWARD VII., A. 1910

# SOUTH WESTERN NOVA SCOTIA.

	Lun	enburg.	Q	ueens.	She	elburne.	Yar	mouth.	7	Cotal.
Year.	Canneries.	Traps.	Canneries.	Traps,	Canneries.	Traps.	Canneries.	Traps.	Canneries.	Traps.
1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	7 7 6 7 6 6 6 6 6 5 6 7 7	14,230 14,850 12,000 13,200 15,220 15,295 16,910 20,220 20,870 15,030 19,000 18,650	8 10 13 11 7 9 9 9 9 9	12,478 12,767 12,760 11,080 15,231 17,085 19,345 18,900 15,800 17,800 22,600	9 11 12 24 25 23 21 21 21 19 16 15	82,085 101,620 101,320 108,210 109,200 112,500 109,400 113,450 42,700 74,500 93,000	9 9 11 17 22 20 19 14 15 12 14	30,250 30,250 23,150 32,500 37,200 38,035 40,810 40,855 44,930 45,180 47,000	33 37 42 59 60 58 55 50 50 46 45 42	139,043 159,487 149,170 164,990 176,851 182,915 186,465 193,418 123,425 128,360 156,480 181,250
Totals	76	195,475	108	194,786	217	1,100,585	176	451,008	577	1,941,854

# SOUTHEASTERN COAST NOVA SCOTIA AND CAPE BRETON.

	Н	alifax.	-Gu	ysboro.	Ric	hmond.	7	Total.
Year.	Canneries.	Traps.	Canneries.	Traps,	Canneries.	Traps.	Canneries.	Traps.
1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	24 22 20 22 21 20 20 20 20 21 19 20 20	64,675 64,210 62,680 89,650 80,630 76,625 70,786 77,783 79,000 74,050 85,620 91,140	30 34 34 32 28 27 28 29 29 38 25 27	85,800 118,100 111,850 125,575 117,600 97,800 88,900 85,160 88,100 70,700 88,606 102,100	15 15 15 20 12 10 11 11 11 11 9	68,544 40,670 79,050 51,980 72,895 41,080 38,450 39,900 36,250 46,050 32,100 40,715	69 71 69 74 61 57 59 60 61 68 54 58	219,019 222,980 253,580 267,205 271,125 215,505 198,136 202,843 203,350 190,800 206,320 233,955
Totals	249	916,849	361	1,180,285	151	587,684	761	2,684,818

# EAST COAST CAPE BRETON.

Year.	CAPE B	RETON.	Victo	ORIA.	Тот.	AL.
	Canneries.	Traps.	Canneries.	Traps.	Canneries.	Traps.
1897	16	42,400	20	26,215	36	68,61
1898	14	43,700	18	18,175		61,87
[899	15	61,199		13,699	32	74,89
900	13	46,351		13,217		59,56
.901	18	38,270	17	13,983		52,25
902	12	39,050		15,550		54,60
903	14	31,588		14,553		46,14
904	12	29,890		14,256		44,14
905	11	39,200		14,064		53,26
906	15 12	33,360		16,553		49,91
907	12	32,365 31,686		13,886 14,224		46,25 45,91
Totals	164	469,059	192	188,375	356	657,43

# STRAIT EAST OF NOVA SCOTIA AND C. B.

	Симі	BERLAND.	Cor	CHESTER.	Ι	PICTOU.	Ant	IGONISH.	In	VERNESS.	Т	OTAL.
YEAR.	Canneries.	Traps.	Canneries.	Traps.	Canneries.	Traps.	Canneries.	Traps.	Canneries.	Traps.	Canneries.	Traps.
1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	24 28 31 37 38 36 37 40 37 32 31 31	31,500 39,450 45,265 46,630 47,250 54,390 49,250 52,295 48,500 47,120 47,804 54,330	1 4 3	1,200 1,200 1,500 4,600 4,400 4,400 4,000 4,000 4,000 4,000 4,000 4,000 4,000	26 25 28 26 27 25 21 22 23 23 23 21	44,550 46,415 43.175 47,700 49,480 47,660 43,700 44,429 54,959 50,800 61,550 64,675	5 6 6 6 6 6 6 6 6 6	16,100 22,150 26,160 20,800 19,250 17,400 16,800 21,300 21,150 18,400 18,060 21,847	24 27 27 20 20 19 18 18	49,960 54,000 55,000 49,305 41,100 41,450 37,320 40,400 47,400 55,400 47,950	76 84 93 100 94 90 86 88 86 83 80	143,310 163,215 171,100 169,035 161,480 165,300 151,070 162,424 175,009 184,720 179,614
Totals	402	563,784	26	41,000	290	608,093	71	239,417	248	567,185	1,037	2,019,479

# EAST COAST, NEW BRUNSWICK.

	Rest	rigouche.	GLO	UCESTER.			HUM-		KENT.		STMORE-	To	TAL.
YEAR.	Canneries.	Traps.	Canneries.	Traps.	Canneries.	/	Traps.	Canneries.	Traps.	Canneries.	Traps.	Canneries.	Traps.
1897	3	2,260 3,260 3,500 4,100 4,200 4,680 5,100 6,650 5,650 5,100 6,600	60 64 67 67 64 61 63 65 67 69	76,860 80,700 82,300 85,300 89,400 91,400 101,000 105,000 101,800 113,500 111,500	12		12,200 13,000 14,000 15,300 14,500 15,000 15,000 15,000 16,500 17,000 18,500	57 35 40 44 46 45 39	48,400 55,000 48,500 52,700 54,900 37,000 38,000 41,500 39,000 34,700 54,500	85 74 74 78 79 68 66 58	46,100 58,000 61,800 60,000 58,000 66,500 68,000 75,000 75,000 95,700		185,820 209,960 210,100 217,400 221,000 218,180 232,600 243,150 242,150 286,800
Totals	26	55,300	776	1,132,760	151		180,700	571	547,700	844	822,300	2,368	2,738,760

# PRINCE EDWARD ISLAND.

YEAR.	es.							
	Canneries	Traps.	Canneries.	Traps.	Canneries.	Traps.	Canneries.	Traps.
1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908.	50 52 55 55 54 51 53 54 52 52 49 50	75,880 96,500 90,680 87,595 95,310 98,576 101,775 111,050 122,900 118,500 130,000	63 60 67 63 62 51 51 53 55 52 51	49,800 59,290 67,000 77,550 54,930 57,680 74,240 78,880 74,825 64,500 83,960	107 118 118 128 109 90 86 92 89 84 84 82	90,453 128,495 125,434 136,972 113,070 88,390 93,740 104,060 94,030 115,220 122,970 136,339	220 230 240 246 225 192 199 199 188 184 183	216,133 284,285 283,114 302,117 280,880 241,896 253,195 295,975 283,960 312,945 305,970 350,319

# MAGDALEN ISLANDS AND QTEBEC.

Year.		ANDS.	· G	ASPÉ.	Bonav	ENTURE.	North	H SHORE.	TOTAL.		
r ear.	Can- neries.	Traps.	Can- neries.	Traps.	Can- neries.	Traps.	Can- neries.	Traps.	Can. neries.	Traps.	
897	63	76,370	22	29,655		9,895		<b>7</b> 75		116,698	
898	88	99,385	29	35,230		14,395		13,460		162,470	
899	87	90,135		41,450 26,350		15,750 16,600		12,010 $6,970$		159,348 134,988	
900	100 83	85,065 78,520		19,500		13,600		17,100		128,720	
902	43	56,500		7,950		11,170		16,450		92,07	
903		51,110	16	15,350	11	10,600	22	9,250		86,31	
904	45	58,200	15	15,500	11	11,600		7,620		92,92	
905	50	50,645		24,200		11,000		8,800		94,64	
906		61,650		7,500		13,720		6,765		89,63	
907	57	82,712		8,064		9,150		8,464		108,39	
908	48	74,230	13	16,160	11	13,050	18	6,449	90	109,88	
Totals	736	864,522	222	246,909	136	150,530	247	114,113	1,341	1,376,07	

# RECAPITULATION.

Lobsters canned and in the shell.

Total.	Th. cans. cwt. in shell. 11,130,554 251,831 10,730,594 348,364 10,700,594 146,364	189, 189, 164,	142,	- 111, 153,	101,	9 9 7 8	125,852,415 1,919,006
ec.	cwt. in shell. 1 lb. 94 11, 201 100, 100, 100, 100, 100, 100, 1						1,416 125
Quebec	1 lb. cans. c 1,036,202 1,067,058	1,022,106 825,171	708,018	848,634 1,148,412	798,800	819,723 696,476	11,008,692
ard Island.	swt. in sk	135		<del></del>			4,484
Prince Edward Island	1 lb. cans. c 2,466,682 2,340,020	2,223,712	2,039,603	2,501,100	2,289,288	2,839,489	29,123,576
nswick.	cwt. in shell.  22,055 21,776	19,729	20,853	16,882	12,889	12,401	210,537
New Brunswick.	s. 2222	2,038,692 1,842,340	1,965,296	2,055,100	2,420,860	2,731,012 2,716,968	26,860,112
Scotia.	cans. cwt. in shell. 114,266 229,682 210,294 326,313	169,196	120,902	92,513	87,956	84,279 87,321	1,702,569
Nova S	1 lb. cans. 5,214,266 5,210,294	4,851,402 5,263,780 5,003,023	4,637,204	5,357,454	4,595,816	4,270,326 4,399,610	58,860,035
Year,		1899 1900 1901					

RECAPITULATION.

Number of lobster canneries and traps.

1J.	Traps. 1, 156,352 1, 335,641 1, 336,935 1, 336,3512 1, 333,512 1, 233,512 1, 235,397 1, 288,397 1,	15,645,174
Total.	Canneries. 738 814 855 919 919 855 723 722 723 7701 661 6675	9,134
ec.	Traps. 116,695 162,470 159,345 1134,985 128,720 92,070 92,070 92,920 92,920 92,645 108,890	1,376,074
Quebec.	Canneries. 154 155 155 151 151 151 151 151 151 151	1,341
Prince Edward Island.	Traps. 216,133 226,133 284,285 284,285 280,117 280,880 241,896 2253,195 2253,195 235,975 235,975 235,975 3305,977	3,410,789
	Canneries. 220 230 246 246 246 190 190 198 184 184	2,493
nswick.	Traps. 220, 912 243,719 244,861 229,739 229,739 229,739 229,739 229,739 229,739 229,739 229,949 226,550 2289,951	3,068,055
New Brunswick.	Canneries. 201 199 2216 2217 227 227 199 199 198 198 198	2,443
cotia.	Traps. 602,612 645,167 681,183 688,972 702,292 667,531 655,052 643,552 591,770 600,125	7,790,256
Nova Scotia	Canneries. 218 221 224 2240 2240 2240 2240 2240 2240 2	2,857
Year.	897. 898. 899. 1900. 1901. 1903. 1904. 1907.	

An examination of the above statistics will reveal that though there have been material fluctuations in the quantity of gear operated and the lobsters packed from year to year in specific localities, and that there has been considerable reduction in the shipments of live lobsters, looking broadly over the whole lobster fishing areas, the fishery has been and continues to be a comparatively steady one.

The total value of the catch during 1908, it will be observed, aggregated \$4,200,279,

as follows:--

	Cans.	In Shell.	Total.
Nova Scotia\$1	1,319,882	\$834,612	\$2,154,496
New Brunswick	815,090	87,485	$902,\!575$
Prince Edward Island	929,533	- 3,710	933,243
Quebec	208,942	1,025	209,967

This places the lobster industry as that of second in importance in Canada, the first being salmon, the value of which, in 1908, was \$4,814,250, and the third cod,

which, in 1908, was valued at \$3,361,409.

It will also be noticed that the bulk of the live lobster trade is conducted on the southwestern portion of Nova Scotia and in the Bay of Fundy, where, owing to the climatic conditions and the proximity and readiness of access to the large markets for this product in the United States, the conditions for the industry are peculiarly favourable.

#### PROBABLE CHANGE IN THE LOBSTER TRADE.

The writer confidently looks for a coming revolution in the live or lobster-in-the shell trade. Hitherto it would appear that the epicurean demand has been, as it at present is, for a live lobster to be cooked for immediate consumption; the fact that it is alive immediately before being served apparently fills every requisite, and the article is prized beyond any other lobster diet that it is possible to produce.

Everywhere and in every connection has a marvellous development of cold storage taken place, which has done so much for the commercial world as well as the producer and the consumer in all branches of transportation and conservation of perishable articles of food, and it is not too much to say that it has created a new era in this respect, and is yet capable of enormous development and ramifications. This great aid is as capable of application to all branches of the fish traffic as it has been and is fast becoming to the agriculture, dairy and other products, in which it is so great a factor.

To this aid, then, it is looked to evolve a lobster trade which has hitherto been but fluctuating and unsatisfactory, due principally to the absence of proper cold storage transportation, as well as to the carelessness of those who have engaged in the business in a desultory manner, the net result being that the article reached the consumer at a high price, but in very poor and unattractive condition; hence the

business has not developed.

The probable innovation to which the above remarks have reference is the practical replacing of the 'live' lobster by the 'boiled-in-the-shell' lobster, the development of which under the conditions above explained seems to be merely a question of time and effort on the part of the producer to educate the popular taste with a prime and wholesome article of food.

If the growing necessities and conditions are correctly assumed the time is fast approaching, if it has not already arrived, when the long established prejudice against cold storage in fish foods especially, will disappear with the many similar ones that

have preceded it.

It does not appear to require any great argument to induce a choice between the two articles. It may be, and doubtless is, that in some short carriages live lobsters could reach their destination in prime and excellent condition, and being immediately

cooked would be as nearly perfect as possible. This result, however, can be attained only where all conditions are most favourable beginning at the capture and landing ashore, and followed during the transportation of minimum distance, to the marketing and preparation for the table. In all other instances, however, it must be apparent, that days must elapse before it is possible to place the lobsters upon the markets at their destination, the number of days being gauged by the distances and facilities of transportation, and live lobsters have been shipped to Chicago and to Denver, Colorado. The main object to be achieved is to have them reach the objective point showing some signs of life. This being accomplished the venture is supposed to have been successful. When comparatively long distances have to be covered it is physically impossible that the lobsters can reach their destination in anything like a condition to ensure a good article of food when cooked, and indeed it is doubtful if many of them would not be rejected for boiling at some of the canneries. Obviously these lobsters must be in a half starved, sick and dying condition and their flesh shrunken.

On the other hand the 'boiled-in-the-shell lobster' is cooked immediately upon landing when in the primest possible condition, with no chance to deteriorate. Supposing it then be carefully washed to remove the scum and any other impurities incidental to boiling, thoroughly dried, neatly wrapped in tissue or oiled paper, packed in compartment boxes, placed in cold storage and maintained chilled in a uniform temperature, it seems to go without saying that this would be the preferable article to introduce into the markets, as it must ultimately prove itself to the consumer.

In 1903-4 the writer was associated with some other gentlemen in making some inquiries in fishery matters on certain portions of the Bay of Fundy and Magdalen Islands and where distances made it impossible to engage in the live lobster trade, he advocated and suggested to the fishermen the method above explained, which he has since continued to do when discussing the lobster business with those interested.

Therefore with the development and growth of the application of cold storage, he is convinced that the establishment of a large and lucrative business in the direction above explained is within measurable distance, and it would be impossible at this juncture to predict the effect such an event may have upon the canning industry in view of the price which such an article would demand upon the markets, and as it would undoubtedly open to the Canadian producers the almost unsupplyable markets of Europe.



# APPENDIX No. 1.

# EXPENDITURE AND REVENUE.

The total expenditure for all fisheries services, except civil government, for the fiscal year ending 31st March, 1909, including Fishing Bounty, amounted to \$951,728.- $\frac{59}{100}$ , being within the appropriation by \$533,171. $\frac{41}{100}$ .

The total net fisheries revenue, during the same period, for rents, license fees, fines and sales, including the *modus vivendi* licenses to United States vessels, amounted

to \$82,715.56.

Service.	Expenditure.	Vote.
Sal. and Disb. Fishery Officers. Fish-Breeding. Fisheries Protection Service Fishing Bounty. Miscellaneous Fisheries.  Total.	\$ cts. 161,756 \$\overline{3}\$4 190,563 \$19 242,601 \$1 159,999 90 196,808 \$02	\$ cts. 192,900 00 322,300 00 270,500 00 160,000 00 539,200 00 1,484,900 00

The following summary shows the salaries and disbursements of the fishery officers in the several provinces, together with expenses for maintenance of fish breeding establishments throughout Canada, and the Fisheries Protection Service. Details will be found in the Auditor General's report under the proper headings.

#### Salaries and Disbursements Fishery Officers Detailed.

Province.	Offi		Guar	DIANS.	Miscel-	Totals.
	Salaries.	Disburse- ments.	Wages.	Expenses.		
General account Ontario. Quebec. New Brunswick Nova Scotia Prince Edward Island Manitoba Alberta. Saskatchewan British Columbia Yukon Total Expenditure.	3,600 00 3,425 00 6,488 95 9,695 38 3,150 00 1,500 00 	67 20 1,165 23 3,930 63 8,944 90 16,654 19 1,880 53 846 64 2,164 90 4,265 31	430 00 21,104 16 18,737 56 3,294 37 1,097 95 1,959 62 891 10 11,840 97	99 15 744 96 54 65 694 40 3,710 18 1,035 20	19 00 10 75 1,621 15 113 91 30 70 306 74 45 00	\$ cts. 4,751 36 4,784 23 7,895 53 38,904 12 44,601 04 8,410 25 3,945 73 5,713 80 6,591 20 35,139 58 1,019 50

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# FISH BREEDING EXPENDITURE DETAILED, 1908-09.

Hatcheries.	Salaries.	Maintenance	Total Expenditure of Hatchery.	Expenditure by Province.
Ontario.	\$ cts.	\$ cts.	\$ cts.	и i м \$ cts.
Ottawa New Castle Quinte Pond Sandwich Sarnia Wiarton	684 17 1,445 00 31 25 1,075 00 779 17 1,467 50	1,076 41 1,776 62 357 45 7,702 74 6,780 36 4,682 35	2,760 58 3,221 62 388 70 8,277 74 7,559 53 6,149 85	28,358 02
Quebec.				20,000 02
Chelsea Trout Pond Gaspé Lac Tremblant Lake Lester Magog St. Alexis Tadousac Magdalen Islands	1,112 50 437 90 700 00 841 67 400 00 912 50	113 50 1,406 34 977 33 1,665 12 2,220 12 868 16 4,115 87 989 45	113 50 2,518 84 1,415 23 2,365 12 3,061 79 1,268 16 5,028 37 989 45	16,760 46
New Brus wick.				20,100 10
Miramichi Shemogue Shippegan St. John Pond St. John River Restigouche	89 58 925 66	2,734 58 2,694 03 2,696 89 7,105 63 670 73 3,027 54	3,734 58 2,694 03 2,696 89 7,195 21 1,596 39 4,297 29	22,214 39
Nova Scotia.				
Bay View Bedford Canso Fourchu Pond Margaree Windsor Chester	1,500 00 1,011 66 800 00	1,991 63 8,320 31 2,840 03 1,079 75	2,859 42 2,056 52 1,991 63 8,320 31 3,851 69 1,879 75 9 95	
Prince Edward Island.				20,969 27
Charlottetown Kelly's Pond Georgetown  Manitoba.	900 00	2,772 59 1,020 33 2,494 55	2,772 59 1,920 33 2,494 55	7,187 47
Berens River		6,045 08	6,045 08	
Selkirk Winnipegosis			4,223 09 6,718 96	16,987 13
· British Columbia.	1 000 00	0.070.00	# oro co	
Babine Fraser River Granite Creek. Harrison Lake. Pemberton River Inlet Skeena River. Stwart Lake. General Account	1,000 00 1,100 00 1,000 00	6,014 48 4,774 91 10,301 16 8,265 66 7,911 95 4,775 20 7,311 93	7,252 62 7,114 48 5,874 91 11,501 19 9,307 29 8,911 95 5,875 20 8,311 93	64,149 57 13,936 88
Total Expenditure				190,563 19

EXPENDITURE DETAILED OF FISHERIES PROTECTION SERVICE, 1908-09.

99				REP	REPAIRS.	SUPPLIES	IES.				Net
Vessels,	Salaries.	Fuel.	Provisions	Hull.	Engine.	Engine.	Deck.	Clothing.	Misc.	Total.	Expenditure of Vessels.
	& cts.	s cts.	ets.	e cts.	& cts.	es cts.	& cts.	ets.	& cts.	e cts.	cts,
Canada Less Naval Militia Transfer	22,394 22	3,016 41	11,603 28	1,587 14	1,948 07	1,874 13	4,241 27	2,310 78	3,156 20	52,131 50 8,135 86	200
'Constance' Less Custom's Dept. Transfer	6,162 27	1,388 26	2,391 91	4,394 69	6,629 88	312 75	1,512 42	758 50	2,101 48	25,652 16 *13,532 56	
'Curlew' 'Christine Less Custon's Dept. Transfer	6,578 52 4,924 61	1,460 +8 974 74	2,075 31 1,027 16	2,490 22	901 15	191 82	795 48	470 25	509 83 812 75	10,694 79	13,023 82
Falcon, Georgia Kestrel Lady of the Lake, Alcedo, Osmey	5,100 00 4,048 51 15,771 52 4,146 90 3,071 94	1,861 33 649 77 4,410 50 562 65 551 80	1,797 718 6,507 1,181 987	349 491 44 345	438 62 91 70 692 94 5 56 50	149 224 691 353 318	357 89 1,193 414 228	114 75 208 00, 30 24	398 50 224 08 1,555 86 499 08 36 60		10,568 48 6,745 41 30,897 40 7,560 32 5,662 19 133 80
70 70	7,602 92 13,969 33 2,049 33 600 00	1,493 61 5,707 86 570 65	4,152 4,933 659	1,247 2,542 35 <b>3</b>	1,184 08 1,184 08 25 68	700 66 433 49 368 19	960 33 1,544 71 600 34	671 75 600 85 50 25			
Vigilant General account Fisheries Int. Bureau.	14,566 87 3,387 89	3,930 00	3,766 24	8,714 88 45 00	3 792 26 0 27 20	1,786 84	993 40	758 40 780 16	729 33		
Total Expenditure						:	:	•			242,601 14

\* Amounts paid by Customs Department re 'Constance' and 'Christine' in Customs service.

# FISHERIES GENERAL EXPENDITURE,—1908-09.

	\$	cts.	\$	cts
Miscellaneous.				
Building fishways		4 22		
		0 01		
Cold storage	<b>32,</b> 68	8 09		
Distributing fishing bounty	45,22			
Dogfish Red. works		7 73		
F. P. S. Cruiser Pacific Coast.		4 21		
Georgian Bay Laboratory	1,50	0 00		
Legal and incidental expenses		0 51		
Marine Biological Stations	20,09			
Oyster culture		5 36   4 78		
Souris Fish Drier, P.E.I.		2 00		
Transportation of fresh fish	25,00			
Launches B.C		8 85		
Steamer to replace 'Georgia'	18,00	00 00		
Allowance to customs officers issuing licenses to U.S. vessels		86 60		
International Fishery Commission		5 38		
Inquiries Federal and Provincial Rights re Fisheries	74	18 12		
Total			§ 196,	808 02

STATEMENT of Fisheries Revenue paid to the Credit of the Receiver General of Canada for the fiscal year ended March 31, 1909.

Provinces.	Amount collected.		Refun	ds.	Net .	Amoui	nt.
	\$ c	ts.	\$	cts.	\$		${ m cts}.$
Ontario . Quebec . New Brunswick . Nova Scotia . Prince Edward Island . Manitoba . Alberta . Saskatchewan . British Columbia . Yukon . Hudson Bay . Modus Vivendi Licenses .	5,394 7 2,393 6 3,718 2 915 6 1,085 8 41,321 6 223 6	91 89 70 66 22 00 50 65 00		75 25 00 14 00	3	770 6,797 2,385 5,369 2,393 3,704 915 1,085 39,251 228 9,794	91 14 70 66 22 00 50 65 00
Net Total					\$ 8	32,715	56

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COMPARATIVE STATEMENT of Expenditure and Revenue of the

_							
l.		, 1890-	91.	1891-	92.	1892-	93.
Number.	<del></del>	Expenditure	Revenue.	Expenditure	Revenue.	Expenditure	Revenue.
		• \$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
2 3 4 5	General account Fisheries Ontario. Quebec. New Brunswick. Nova Scotia Prince Edward Island	15,540 30 10,666 98 16,082 77 17,844 19 3,242 25	26,517 70 3,642 14 7,193 69 5,582 65 667 00	15,155 83 10,917 36 15,707 98 18,755 86 1,835 65	25,368 90 4,742 76 6,334 83 3,357 42 166 00	20,116 91 11,761 34 15,721 05 19,444 22 2,847 60	30,623 09 7,471 70 7,831 53 6,782 02 304 10
7	Manitoba and N. W. Terr	3,609 03	1,234 00	3,593 43	1,079 00	3,932 96	1,661 68
9	British Columbia	4,220 53 39,496 45 83,050 16 13,382 28	12,859 02 1,286 50 1,934 49	6,158 17 43,957 74 93,397 40 17,449 06	8,192 48 178 00	5,490 60 47,322 49 106,805 39 100,602 14	40,264 00
	Totals	207,234 94 165,967 22	60,917 19	226,928 48 156,892 25	49,719 39	334,044 70 159,752 15	94,938 12
		1897-	98.	1898-	99.	1.899	-00.
13 14 15 16 17 18 19 20	General Account Fisheries Ontario Quebec New Brunswick Nova Scotia Prince Edward Island Manitoba N. W. Territories British Columbia Yukon	11,140 16 17,063 58 21,683 91 6,775 78 1,206 26 2,324 66 8,508 79	30,574 57 7,571 15 5,317 08 11,511 85 2,707 57 1,515 00 393 87 47,864 75	2,632 12 11,784 22 11,350 27 22,922 50 25,348 11 6,832 85 1,883 37 4,065 68 8,459 47	5,830 85 6,287 71 10,430 08 6,668 22 2,242 24 1,537 85 150 50 45,801 75	652 41 3,804 94 5,452 41 21,659 94 27,461 91 7,364 30 1,723 59 3,848 25 13,662 17	794 12 2,543 04 12,015 27 5,494 49 2,207 12 2,028 00 1,522 50 53,195 30
22 23 24	Hudson Bay Territory Fish-breeding Fisheries Protection Service Miscellaneous	28,002 32 101,807 96		34,522 57 105,133 27 23,207 73		38,070 12 97,370 11	
The second second	TotalsFishing bounties	280,061 98 157,504 00	107,455 84	427,599 16 159,459 00	75,949 20	411,717 35 160,000 06	79,799 8
		1904	-05.	1905	-06.	1906	-07.
27 28 29 30 31 32 33	General Account Fisheries Ontario Quebec New Brunswick. Nova Scotia Prince Edward Island Manitoba. Alberta Saskatchewan	4,294 60 6,769 16 25,253 16 32,619 85 6,879 05 2,800 64	1,471 51 4,648 86 11,887 19 6,448 88 2,046 50 4,875 70	2,261 66 4,949 67 8,123 04 35,856 38 49,351 10 9,351 81 3,687 07	499 15 7,564 39 11,395 84 4,934 43 2,206 25 4,148 00	1,437 28 3,188 34 5,590 94 24,987 70 24,989 09 5,792 32 2,173 33	349 1 8,145 9 9,153 0 3,118 7 1,300 9
35 36 37 38 39 40	Saskatchewan N. W. Territories British Columbia Yukon Hudson Bay Territory Fish-breeding Fisheries Protection Service Miscellaneous.	7,003 55 16,631 37 1,400 00 149,419 24 462,082 12	1,151 50 47,436 00 340 00 10 00	11,124 22 30,141 33 1,083 31 209,279 78 249,876 37 194,993 61	868 97 51,532 50 282 00 10 00	204,837 82	
41.	Totals	822,360 46	90,988 14	968,626 00 158,546 65	98,009 69	534,669 90 159,015 75	59,544 2
	Grand Totals						

Note-Miscellaneous Revenue consists of U. S. Modus vivendi Licenses.

SESSIONAL PAPER No. 22
Fisheries Department from July 1, 1890, to March 31, 1908.

1893	-94.	1894	-95.	1895	.96.	1896	5-97.
Expenditure	Revenue.	Expenditure	Revenue.	Expenditure	Revenue.	Expenditure	Revenue.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
22,634 37 11,692 82 18,522 94 20,420 81 3,078 55 5,331 29 5,283 21 45,024 67	28,632 82 7,211 82 8,333 24 5,296 27 980 15 926 99 25,337 90	21,938 56 12,459 34 21,370 94 23,555 38 3,796 58 6,178 71 6,218 74 39,730 93	33,211 60 8,836 18 11,170 36 7,075 07 3,312 30 2,458 80 23,517 25	24,917 48 11,870 43 20,526 56 23,049 41 3,555 87 6,915 20 6,226 77 38,050 41	35,681 68 8,160 98 10,696 88 6,180 93 2,161 85 2,256 69 26,410 75	2,198 47 21,592 40 12,910 80 21,671 92 23,682 33 3,744 36 { 1,908 14 2,181 58 8,841 64 27,330 73	32,814 66 7,876 12 10,110 77 5,239 55 2,032 25 1,719 00 344 13 39,888 82
115,147 59 34,892 19		100,207 29 24,619 86		102,021 72 20,203 25		99,357 01	
282,028 44 158,794 54	76,719 19	260,076 33 160,089 42	89,581 56	257,237 10 163,567 99	91,549 76		100,025 30
1900	)-01.	1901	-02.	1902	-03.	1908	3-04.
1,117 49 3,819 57 7,934 03 28,452 51 35,760 39 7,934 03 2,669 74 6,251 39 17,886 36	717 35 4,738 92 10,150 40 6,595 94 1,525 30 1,103 00 1,222 55 52,960 35	765 78 4,445 93 6,242 58 23,813 62 32,618 00 7,814 02 2,624 87 5,928 22 18,560 73 2,066 66	373 42 2,498 85 11,658 34 6,084 65 1,843 45 2,279 00 950 07 41,178 65 1,130 00	402 97 4,650 53 6,785 86 27,132 84 39,118 79 7,081 60 3,129 70 7,076 26 17,808 45 1,522 00	1,818 83 4,379 15 11,188 02 3,962 45 2,007 35 1,784 00 1,350 50 43,015 02 320 00	1,362 11 4,500 43 7,619 67 27,664 34 30,003 01 7,320 96 2,789 74 7,317 49 15,133 65 1,400 00	2,578 48 4,670 64 10,593 20 3,685 75 1,983 42 4,002 70 922 50 56,904 34 240 00 10 00
68,961 40 124,211 21 27,833 79	9,178 50	79,891 85 152,723 69 56,131 26	11,223 65	77,330 86 145,137 49 30,903 27	8,925 40	109,286 07 204,654 66 56,828 18	10,165 50
332,767 07 158,802 50	88,145 11	393,627 21 155,942 00	79,169 58	368,091 12 159,853 50	78,635 82	475,880 31 158,943 70	95,756 53
190	7-08.	190	8-09.	_			
3,135 91 4,857 23 8,200 02 36,445 88 45,241 50 9,455 80 4,638 51 	458 00 6,185 63 11,541 20 4,470 45 3,013 85 3,527 05 1,151 10 48,737 55 274 00 360 00	4,751 36 4,784 23 7,895 53 38,904 12 44,601 04 8,410 25 3,945 73 5,713 80 6,591 20 35,139 58 1,019 50 190,563 19 242,601 14 196,808 02	770 78 6,797 91 12,385 14 5,369 70 2,393 66 3,704 22 915 00 1,085 50 39,251 65 228 00 20 00	a Medical			
956,196 23 156,114 50		791,728 69 159,999 90					
		. 951,728 59	82,715 56				

# APPENDIX No. 2

# FISHING BOUNTIES.

The payments made for this service are under the authority of the Revised Statutes, 1906, chap. 46, intituled: 'An Act to encourage the development of the Sea Fisheries and the building of fishing vessels,' which provides for the payment of the sum of \$160,000 annually, under regulations to be made from time to time by the Governor General in Council.

#### REGULATIONS.

The regulations governing the payment of fishing bounties were established by the following Order in Council :-

> AT THE GOVERNMENT HOUSE AT OTTAWA, TUESDAY, the 30th day of June, 1908.

#### Present:

HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

Whereas, in view of the Revision of the Statutes of Canada in 1906, it is necessary that the Regulations governing the payment of fishing bounties which were adopted by Order in Council on the 10th December, 1897, be readopted under chapter 46 of the Revised Statutes of Canada, 1906, "The Deep Sea Fisheries Act";

And whereas new conditions require certain changes in the existing regulations in

order to establish a better interpretation of the bounty system;

Therefore His Excellency the Governor General in Council is pleased to order that the Regulations established by the order in Council of the 10th December, 1897, under the provisions of the Bounty Act of 1891, 54-55 Victoria, chapter 42, shall be and the same are hereby rescinded and the following substituted therefor :-

1. Resident Canadian fishermen who have been engaged in deep-sea fishing in Canadian vessels or boats for fish other than shell-fish, salmon and shad, or fish taken in rivers or mouths of rivers, for at least three months, and have caught not less than 2,500 pounds of sea fish, shall be entitled to a bounty; provided always that no bounty shall be paid to men fishing in boats measuring less than 13 feet keel, and not more than 3 men (the owner included) will be allowed as claimants in boats under 20 feet.

2. No bounty shall be paid upon fish caught in trap-nets, pound-nets and weirs, nor upon the fish caught in gill-nets fished by persons who are pursuing other occupations than fishing, and who devote merely an hour or two daily to fishing these nets

but are not, as fishermen, steadily engaged in fishing.

3. Only one claim will be allowed in each season, even though the claimant may

have fished in two vessels, or in a vessel and a boat or in two boats.

4. The owners of boats measuring not less than 13 feet keel, whether propelled by oars, sails or other motive power, which have been engaged during a period of not less than three months in deep sea fishing for fish other than shell-fish, salmon or shad, or fish taken in rivers, or mouths of rivers, shall be entitled to a bounty on each such boat.

5. Canadian registered vessels, owned and fitted out in Canada, of 10 tons and upwards (up to 80 tons), by whatever means propelled, contained within themselve which have been exclusively engaged during a period of not less than three months in the catch of sea-fish other than shell-fish, salmon or shad, or fish taken in rivers, or mouths of rivers, shall be entitled to a bounty to be calculated on the registered tonnage which shall be paid to the owner or owners.

6. Owners or masters of vessels intending to fish and claim bounty on their vessels must, before proceeding on a fishing voyage, procure a license from the nearest Collector of Customs or Fishery Overseer, said license to be attached to the claim when sent in

for payment.

7. The date when a vessel's fishing operations shall be considered as having begun, shall be the day upon which she sails from port on her fishing voyage, after the license has been procured, and the date upon which her fishing season shall end, shall be the day upon which she arrives in port from her last fishing voyage prior to the 1st December. The three months during which a vessel must have been engaged in fishing, to be entitled to the bounty, shall not include such periods as she may have been lying in port, provided that not more than three days may be permitted for the sale, transfer or discharge of her cargo of fish and refitting.

8. Dates and localities of fishing must be stated in the claim, as well as the quan-

tity and kinds of sea fish caught.

9. Ages of men must be given. Boys under 14 years of age are not eligible as claimants.

10. Claims must be sworn to as true and correct in all their particulars.
11. Claims must be filed on or before the 30th November in each year.

12. Officers authorized to receives claims will supply the requisite blanks free of charge, and after certifying the same will transmit them to the Department of Marine and Fisheries.

13. No claim in which an error has been made by the claimant or claimants shall

be amended after it has been signed and sworn to as correct.

- 14. Any person or persons detected making returns that are false or fraudulent in any particular, may be debarred from any further participation in the bounty, and be liable to be prosecuted according to the utmost rigour of the law.
- 15. The amount of the bounty to be paid to fishermen and owners of boats and vessels will be fixed from time to time by the Governor in Council.
- 16. All vessels fishing under bounty license, are required to carry a distinguishing flag, which must be shown at all times during the fishing voyage at the main top-mast head. The flag must be four feet square in equal parts of red and white, joined diagonally from corner to corner. Any case of neglect to carry out this regulation reported to the Department of Marine and Fisheries, will entail the loss of the bounty, unless satisfactory reasons are given for its non-compliance.

# RODOLPHE BOUDREAU,

Clerk of the Privy Council.

The bounty for the year 1908 was distributed on the basis authorized by the following order in council, approved by the Governor General on the 1st February 1909.

His Excellency the Governor General in Council is pleased to order, and it is hereby ordered that the sum of one hundred and sixty thousand dollars, payable under the provisions of chapter 46 of the Revised Statutes of Canada 1906, intituled: 'An Act to encourage the development of the Sea Fisheries and the building of fi hing vessels,' be distributed for the year 1908-1909, upon the following basis:—

Vessels: The owners of the vessels entitled to receive bounty shall be paid one dollars (\$1) per registered ton, provided, however, that the payment to the owner of any one vessel shall not exceed the sum of eighty dollars (\$80), and all vessel fishermen entitled to receive bounty shall be paid the sum of seven dollars and twenty five cents (\$7.25) each.

Boats: Fishermen engaged in fishing in boats, who shall also have complied with the regulations entitling them to receive bounty, shall be paid the sum of three dollars

and ninety cents (\$3.90) each, and the owners of fishing boats shall be paid one dollar (\$1) per boat.

RODOLPHE BOUDREAU, Clerk of the Privy Council.

There were received during the year 1908, 13,972 claims being an increase of 705 over 1907.

The number paid during the year was 13,841, an increase of 648 over the previous year.

The amount of bounty paid to vessels and their crews was \$62,540.30 and to boats and boat fishermen \$97,459.60 or a total of \$159,999.90 during the year.

Vessels to the number of 925 received the bounty, the aggregate tonnage being 22,206 tons, a decrease of 2 vessels and an increase of 375 tons, compared with 1907.

During the year bounty was paid to 12,916 boats and 21,669 boat fishermen, an increase of 650 boats and 1,149 men over 1907.

DETAILED STATEMENT of Fishing Bounty Claims received and paid during the year 1908.

7			Number o	of Claims.	
Province.	County.	Received.	Rejected.	'Held in abeyance.	Paid.
Nova Scotia	Annapolis Antigonish Cape Breton. Cumberland. Digby Guysborough Halifax	188 166 553 10 530 1,039 1,414	16 4	1 1	183 160 530 6 529 1,039 1,400
,	Hants Inverness Kings Lunenburg Pictou Queens Richmond Shelburne Victoria	346 56 1,067 53 192 844 682 344	1 2 1 1	1	346 55 1,065 51 191 842 682 34
	Yarmouth	$\frac{206}{7,690}$	37	5	$\frac{208}{7,648}$
New Brunswick	Charlotte Gloucester Kent. Northumberland. Restigouche St. John	496 415 38 9 1 43	8 4		488 411 38 9
	Totals	1,002	14		988
Prince Edward Island	Kings Prince Queens	574 335 121	1 4	14 18	559 317 117
	Totals	1,050	5	32	993
Quebec	Bonaventure Gaspé Rimouski Saguenay	697 2,579 150 824	1 3	15 17	68: 2,556 156 82:
	Totals.	4,250	5	33	
	Grand totals	13,972	61	70	13,84

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Detailed Statement of Fishing Bounties paid to Vessels in each County during the Year 1908.

Province.	County.	Number of Vessels.	Tonnage.	Average Tonnage.	Number of Men.	Amount Paid.
		·				\$ cts.
Nova Scotia	Annapolis Antigonish Cape Breton Cumberland Digby Guysborough Halifax	5 2 20 1 42 62 55	176 35 337 23 1,164 949 1,302	35 20 17 50 16 85 23 00 27 71 15 30 23 67	41 5 91 5 264 282 323	473 25 71 25 997 35 997 35 3,078 00 2,994 70 3,643 75
	Hants Inverness	23	276	12 00	93	950 25
	Kings Lunenburg Pictou Queens Richmond Shelburne Victoria Yarmouth	121 1 2 48 154 7 7	8,232 16 21 1,083 2,360 93 1,737	68 03 16 00 10 50 22 56 15 32 13 27 23 79	1,809 2 6 264 685 38 456	21,355 25 30 50 64 50 2,997 00 7,326 25 368 50 5,043 00
	Totals	616	17,804	28 90	4,364	49,452 80
New Brunswick	Charlotte		818 2,758 20 63	16 69 13 07 10 00 10 50	159 852 5 15	1,963 50 8,935 00 56 25 171 75
	Restigouche St. John.	1	13	13 00	3	34 75
	Totals	269	3,672	13 65	1,034	11,161 25
Prince Edward Island.	Kings	22 7 5	385 169 89	17 50 24 14 17 80	84 36 20	994 00 430 00 234 00
	Totals	. 34	643	18 91	140	1,658 00
Quebec	Bonaventure		75	15 00	22	234 50
	Rimouski		12	12 00	3	33 75
	Totals	. 6	87	14 50	25	268 25
	Grand totals	. 925	22,206	24 00	5,563	62,540 30

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DETAILED STATEMENT of Fishing Bounties paid to Boats in each County during the Year 1908, showing also total amount paid to Vessels and Boats for the Year.

Province.	County.	Number of Boa's.	Number of Men.	Amount paid.	Total Bounty paid to Vessels and Boats in 1908.
				\$ ets.	\$ ets.
Nova Scotia	Annapolis	178 164 516 5 487 977 1,351	296 221 894 8 8 830 1,496 1,855	1,332 40 1,024 90 4,003 10 36 20 3,724 00 6,788 10 8,585 50	1,805 65 1,096 15 5,000 45 95 45 6,802 00 9,782 80 12,232 25
	Hants. Inverness Kings Lunenburg Pictou Queens. Richmond Shelburne Victoria Yarmouth	323 55 944 52 189 794 528 337	571 79 1,161 79 299 1,281 856 533 232	2,549 90 363 10 5,471 90 360 10 1,355 10 5,790 20 3,866 40 2,415 70 1,036 80	3,500 15 363 10 26,827 15 390 60 1,419 60 8,787 20 11,192 65 2,784 20 6,079 80
	Totals	7,032	10,685	48,703 40	98,156 20
New Brunswick	Charlotte	439 200 36 3	676 550 64 6	3,075 40 2,345 00 285 60 26 40	5,038 90 11,280 00 341 85 198 15
	St. John.	41	- 69	310 10	344 85
	Totals	719	1,365	6,042 50	17,203 75
Prince Edward	Kings Prince Queens.	537 310 112	948 627 235	4,234 20 2,756 20 1,060 50	5,228 20 3,186 20 1,294 50
	Totals	959	1,810	8;050 90	9,708 90
Quebec	Bonaventure Gaspé Rimouski Saguenay	681 2,554 150 821	1,144 4,995 232 1,438	5,142 60 22,035 50 1,054 80 6,429 90	5,142 60 22,270 00 1,054 80 6,463 65
	Totals	4,206	7,809	34,662 80	34,931 05
	Grand totals	12,916	21,669	97,459 60	159,999 90

# GENERAL STATISTICS

The fishing bounty was first paid in 1882.

The payments were made each year on the following basis:-

1882, vessels \$2 per ton, one half to the owner and the other half to the crew, Boats at the rate of \$5 per man, one-fifth to the owner and four-fifths to the men.

1853, vessels \$2 per ton, and boats \$2.50 per man, distributed as in 1882.

1884, vessels \$2 per ton, as in 1882 and 1883.

Boats from 14 to 18 feet keel. .... \$1 00 ...... 1 50 18 to 25 11 Boat fishermen....

1885, 1886 and 1887, vessels \$2 per ton as in previous years. Boats measuring 13 feet keel having been admitted in 1885, the rates were: -Boats from 13 to 18 feet keel, \$1; from 18 to 25 feet keel, \$1.50; from 25 feet keel upwards, \$2, and fishermen \$3 each.

1888, vessels \$1.50 per ton, one half each to owner and crew. Boats, the same as

1885, 1886 and 1887.

1889, 1890 and 1891, vessels \$1.50 per ton as in 1888, Boats \$1 each, Boat fishermen \$3.

1892, vessels \$3 per ton, one half each to owner and crew. Boats \$1 each. Boat fishermen \$3.

1893, vessels \$2.90 per ton, paid as formerly. Boats \$1 each. Boat fishermen \$3. 1894, vessels \$2.70 per ton, distributed as in previous years. Boats \$1 each. Boat

1895, vessels \$2.60 per ton, half each to owner and crew. Boats \$1 each. Boat

fishermen \$3.

1896, vessels \$1 per ton, which was paid to the owners, and vessel fishermen \$5 each, clause No: 5 of the regulation having been amended accordingly. Boats \$1 each, and boat fishermen \$3.50 per man.

1897, vessels \$1 per ton, and vessel fishermen \$6 each. Boats \$1 each, and boat

fishermen \$3.50 per man.

1898, vessels \$1 per ton, and vessel fishermen \$6.50 each. Boats \$1 each, and boat

fishermen \$3.50 per man.

1899, vessels \$1 per ton, and vessel fishermen \$7 each. Boats \$1 each, and boat fishermen \$3.50 per man.

1900, vessels \$1 per ton, and vessel fishermen \$6.50 each. Boats \$1 each, and boat

fishermen \$3.50 per man.

1901, vessels \$1 per ton, and vessel fishermen \$7 each. Boats \$1 each, and boat fishermen \$3.50 per man.

1902, vessels \$1 per ton, and vessel fishermen \$7.25 each. Boats \$1 each, and boat

fishermen \$3.80 per man.

1903, vessels \$1 per ton, and vessel fishermen \$7.30 each. Boats \$1 each, and boat fishermen \$3.90 per man.

1904, vessels \$1 per ton, and vessel fishermen \$7.15 each. Boats \$1 each, and boat

fishermen \$3.75 per man.

1905, vessels \$1 per ton, and vessel fishermen \$7.10 each. Boats \$1 each, and boat

fishermen \$3.65 per man.

1906, vessels \$1 per ton, and vessel fishermen \$7.10 each. Boats \$1 each and boat fishermen \$3.75 per man.

1907, vessels \$1 per ton, vessel fishermen \$7.40 each. Boats \$1 each and fisher-

men \$4 per man.

1908, vessels \$1 per ton, vessel fishermen \$7.25 each. Boats \$1 each and fishermen

\$3.90 per man. Since 1882, 22,462 vessels, totalling a tonnage of 753,699 tons, have received the bounty. The total number of vessel fishermen which received bounty is 166,969, being an average of about 7 men per vessel

The total number of boats to which bounty was paid since 1882 is 361,984, and the

number of fishermen 655,215. Average number of men per boat about 2.

The highest bounty paid per head to vessel fishermen was \$21.75 in 1893; the lowest 83 cents, while the highest to boat fishermen was \$4, the lowest \$2.

The general average paid per head is \$5.18.

COMPARATIVE STATEMENT by Provinces for the Year 1882 to 1908, inclusive, showing:—
(1) Total number of Fishing Bounty Claims received and paid by the Department of Marine and Fisheries.

Vara	Nova Se	COTIA.	NEW BRUN	swick.	P. E. Isi	LAND.	QUEB:	EC.	Тота	L.
YEAR.	Received.	Paid.	Received.	Paid.	Received.	Paid.	Received.	Paid.	Received.	Paid.
1882	6,730	6,613	1,257	1,142	1,169	1,100	3,162	3,117	12,318	11,972
1883	7,171	7,076	1,693	1,579	1,138	1,106	3,602	3,325	13,604	13,086
1884	7,007	6,930	1,252	1,224	923	885	3,470	3,429	12,652	12,468
1885	7,646	7,599	1,609	1,588	1,117	1,025	3,943	3,912	14,315	14,124
1886	7,639	7,702	1,767	1,763	1,131	1,080	4,275	4,355	14,812	14,900
1887	8,262	8,227	1,975	1,958	1,201	1,126	4,138	4,105	15,576	15,416
1888	8,481	8,429	2,065	2,026	1,153	834	4,328	4,310	16,027	15,599
1889	8,816	8,523	2,428	2,392	1,211	1,511	4,664	4,652	17,119	17,078
1890	9,337	9,429	2,522	2,469	1,352	1,257	4,860	4,804	18,071	17,959
1891	10,242	10,063	2,831	2,084	1,482	1,446	5,108	4,913	19,663	18,500
1892	8,272	8,186	1,067	1,001	1,065	1,051	4,425	4,204	14,829	14,442
1893	7,926	7,844	967	881	1,027	1,012	4,059	3,898	13,979	13,635
1894	8,640	8,600	925	911	983	963	3,948	3,876	14,496	14,350
1895	8,835	8,825	979	975	1,009	1,025	3,904	3,955	14,727	14,780
1896	8,597	8,562	1,137	1,064	1,111	1,120	4,366	4,229	15,211	14,975
1897	8,450	8,418	1,042	991	1,175	1,171	4,180	4,149	14,847	14,729
1898	8,446	8,347	934	917	1,143	1,145	4,156	4,092	14,679	14,501
1899	7,894	7,754	849	825	1,016	947	4,134	4,102	13,893	13,628
1900	7,484	7,452	904	904	1,119	1,169	4,264	4,251	13,771	13,776
1901	7,346	7,344	829	826	941	937	4,277	4,267	13,393	13,374
1902	6,710	6,671	802	794	913	912	4,371	4,346	12,796	12,723
1903	6,297	6,284	832	830	978	974	4,110	4,090	12,217	12,178
1904	6,750	6,732	879	866	1,027	994	4,095	4,079	12,751	12,671
1905	7,034	7,018	881	873	921	921	4,350	4,329	13,186	13,141
1906	7,434	7,415	930	923	918	916	4,251	4,249	13,533	13,503
1907	7,124	7,087	904	895	1,000	984	4,239	4,227	13,267	13,193
1908	7,690	7,648	1,002	988	1,030	993	4,250	4,212	13,972	13,841
Totals.	212,260	210,778	35,262	33,689	29,253	28,604	112,929	111,477	389,704	384,548

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(2) Number of vessels, tonnage and number of men which received Bounty in each year.

	Nov	A Scot	IA.	New	Bruns	wick.	P. F	E. Isla	ND.	ς	UEBEC		1	TOTAL.	
YEAR.	No. of Vessels.	Tonnage.	No. of Men.												
1882	588	22,841	5,343	120	2,171	531	15	389	74	63	2,210	538	786	27,611	6,486
1883	700	29,788	6,238	126	2,102	496	16	450	66	62	2,236	443	904	34,576	7,243
1884	700	29,828	6,327	139	2,289	560	16	582	92	56	1,965	382	911	34,664	7,361
1885	629	27,709	5,897	128	2,120	496	19	597	113	55	1,791	317	831	32,217	6,823
1886	562	25,375	5,022	145	2,628	5 <b>2</b> 0	32	1,071	215	52	1,730	320	791	30,804	6,077
1887	566	24,520	4,900	154	2,889	563	38	1,677	338	- 54	1,883	334	812	30,969	6,135
1888	589	26,008	5,450	150	2,545	544	37	1,245	249	51	1,842	388	827	31,640	6,631
1889	597	27,123	5,684	153	2,590	565	35	1,274	239	48	1,729	330	833	32,716	6,818
1890	540	23,955	4,935	133	2,129	447	32	1,002	203	34	1,182	220	739	28,268	5,805
1891	527	22,780	4,618	124	2,051	411	27	778	155	27	924	168	705	26,533	5,352
1892	507	22,279	4,611	108	1,683	343	30	983	139	23	803	159	668	25,748	5,252
1893	536	23,195	4,780	210	2,922	634	27	910	151	32	952	179	805	27,979	5,744
1894	602	24,735	5,077	238	3,189	721	21	594	114	38	1,066	178	899	29,584	6,090
1895	603	25,018	5,184	238	3,107	764	27	769	129	39	1,262	173	907	30,156	6,250
1896	553	23,415	4,607	250	3,337	800	23	656	114	36	1,143	144	862	28,551	5,665
1897	507	21,323	4,829	239	3,079	816	20	490	109	94	833	116	790	25,725	5,870
1898	505	20,868	4,840	239	3,155	859	24	561	125	16	524	77	784	25,108	5,901
1899	519	22,538	5,323	238	3,131	885	15	373	76	17	497	78	789	26,539	6,362
1900	525	22,474	5,352	234	2,969	890	29	737	153	14	459	76	802	26,639	6,471
1901	508	21,469	5,158	242	3,229	872	23	541	115	13	366	69	786	25,605	6,214
1902	505	21,248	5,126	249	3,293	972	28	630	135	13	350	51	795	25,521	6,284
1903	546	21,992	5,173	259	3,454	971	36	765	169	10	290	48	851	26,501	6,361
1904	552	21,285	5,040	257	3,429	981	30	594	126	15	382	73	854	25,690	6,220
1905	620		l l	264	3,600	1,035	28	587	125	10	259	56	922	25,686	6,454
1906	644	20,008	4,891	273	3,753	1,066	32	. 732	147	8	139	33	957	24,632	6,137
1907	612	17,041	4,178	265	3,720	1,010	41	916	178	9	154	34	927	21,831	5,400
1908		17,804	4,364	269	3,672	1,034	34	643	140	6	87	25	925	22,206	5,563
Totals .		627,859	138 185	5 444	78.236	19.786	735	20,546	3,989	825	27,058	5,009	22,462	753,699	166,969

\$9 -10\$ EDWARD VII., A. 1910 \$(3)\$ Number of Boats and boat fishermen which received Bounty in each year.

	Nova-S	SCOTIA.	NEW, BRU	INSWICK.	P. E. I	SLAND.	QUE	BEC.	Тот	AL.
YEAR.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.
1882	6,043	12,130	1,024	2,530	1,087	3,070	3,071	5,716	11,225	23,446
1883	6,458	13,553	1,453	3,309	1,098	3,106	3,266	6,188	12,275	26,156
1884	6,257	12,669	1,086	2,505	869	2,346	3,344	6,416	11,556	23,936
1885	6,970	13,396	1,460	3,254	1,006	2,606	3,857	7,485	13,293	26,741
1886	7,140	13,351	1,618.	3,567	1,048	2,547	4,303	7,981	14,109	27,446
1887	7,662	13,997	1,804	3,994	1,088	2,711	4,051	7,550	14,605	28,252
1888	7,840	14,115	1,876	4,148	797	2,141	4,259	7,852	14,772	28,256
1889	7,926	14,118	2,237	5,032	1,475	3,568	4,602	8,807	16,240	31,525
1890	8,886	15,738	2,324	5,242	1,192	3,024	4,766	9,241	17,168	33,245
1891	9,525	16,552	1,928	4,126	1,383	3,427	4,865	9,402	17,701	33,507
1892	7,679	12,307	893	1,765	1,021	2,047	4,181	7,693	13,774	23,812
1893	7,308	11,748	671	1,314	985	1,962	3,866	7,245	12,830	22,269
1894	7,956	12,899	661	1,281	913	1,813	3,821	7,139	13,351	23,132
1895	8,222	13,106	737	1,434	998	2,141	3,916	7,877	13,873	24,558
1896	8,008	12,454	814	1,553	1,095	2,126	4,189	7,688	14,106	23,821
1897	7,911	12,542	752	1,351	1,151	2,147	4,125	7,572	13,939	23,612
1898	7,872	12,438	- 678	1,237	1,121	2,199	4,076	7,627	13,747	23,501
1899	7,235	11,305	587	1,027	932	1,710	4,085	7,696	12,839	21,738
1900	6,927	10,645	670	1,184	1,140	2,198	4,237	8,004	12,974	22,031
1901	6,836	10,464	584	1,001	914	1,735	4,254	8,017	12,588	21,217
1902	6,166	9,442	545	966	884	1,638	4,333	8,180	11,928	20,226
1903	5,738	8,775	571	964	938	1,722	4,080	7,688	11,327	19,149
1904	6,180	9,556	609	1,082	964	1,792	4,064	7,648	11,817	20,078
1905	6,398	9,822	609	1,047	893	1,630	4,319	8,002	12,219	20,501
1906	6,771	10,138	650	1,139	884	1,648	4,241	7,946	12,546	20,871
1907	6,475	9,739	630	1 158	943	1,750	4,218	7,873	12,266	20,520
1908	7,032	10,685	719	1,365	959	1,810	4,206	7,809	12,916	21,669
Totals	195,421	327,684	28,190	58,575	27,778	60,604	110,595	208,342	361,984	655,215

# (4) Total Number of men receiving Bounty in each year.

Year.	Nova Scotia.	New Brunswick.	P. E. ISLAND.	QUEBEC.	TOTAL.
	No. of Men.	No. of Men.	No. of Men.	No. of Men.	
1882	17,473	3,061	3,144	6,254	29,932
1883	19,791	3,805	3,172	6,631	33,399
1884	18,996	3,065	2,438	6,798	31,29
1885	19,293	3,750	2,719	7,802	33,56
1886	18,373	4,087	2,762	8,301	33,52
1887	18,897	4,557	3,049	7,884	34,38
1888	19,565	4,692	2,390	8,240	34,88
1889	19,802	5,597	3,807	9,137	38,34
1890	20,673	5,689	3,227	9,461	39,05
1891	21,170	4,537	3,582	9,570	. 38,85
1892	16,918	2,108	2,186	7,852	29,06
1893	16,528	1,948	2,113	7,424	28,01
1894	17,976	2,002	1,927	7,317	29,22
1895	. 18,290	2,198	2,270	8,050	30,80
1896	17,061	2,353	2,240	7,832	29,48
1897	17,371	2,167	2,256	7,688	29,48
1898	17,278	2,096	2,324	7,704	29,40
1899	16,628	1,912	1,786	7,774	28,10
1900	15,997	2,074	2,351	. 8,080	28,50
1901	15,622	1,873	1,850	8,086	27,43
1902	. 14,568	1,938	1,773	8,231	26,51
1903	13,948	1,935	1,891	7,736	25,51
1904	14,596	2,063	1,918	7,721	26, 29
1905	15,060	2,082	1,755	8,058	26,95
1906	15,029	2,205	1,795	7,979	27,00
1907	13,917	2,168	1,928	7,907	25,92
1908	15,049	2,399	1,950	7,834	27,23
Totals	465,869	78,361	64,603	213,351	822,18

9-10 EDWARD VII., A. 1910

(5) Total annual payments of fishing Bounty.

YEAR.	Nova Scotia.	New Brunswick.	P. E. Island.	Quebec.	Total.
	\$ cts.	\$ cts.	\$ ets.	\$ cts.	\$ ets.
1882	106,098 72	16,997 00	16,137 00	33,052 75	172,285 47
1883	89,432 50	12,395 20	8,577 14	19,940 01	130,344 85
1884	104,934 09	13,576 00	9,203 96	28,004 93	155,718 98
1885	103,999 73	15,908 25	10,166 65	31,464 76	161,539 39
1886	98,789 54	17,894 57	10,935 87	33,283 61	160,903 59
1887	99,622 03	19,699 65	12,528 51	31,907 73	163,757 92
1888	89,778 90	18,454 92	9,092 96	32,858 75	150,185 53
1889	90,142 51	21,026 79	13,994 53	33,362 71	158,526 54
1890	91,235 64	21,108 33	11,686 32	34,210 72	158,241 01
1891	92,377 42	17,235 96	12,771 30	34,507 17	156,891 85
1892	109,410 39	10,864 61	9,782 79	29,694 35	159,752 14
1893	108,060 67	12,524 09	9,328 62	28,320 72	158,234 10
1894	111,460 03	12,690 80	7,875 79	28,040 18	160,066 80
1895	110,765 27	12,919 32	9,285 13	30,598 27	163,567 99
1896	98,048 95	13,602 88	9,745 50	32,992 44	154,389 77
1897	102,083 50	13,454 50	9,809 00	32,157 00	157,504 00
1898	103,730 00	13,746 00	10,188 00	31,795 00	159,459 00
1899	106,598 50	13,514 50	7,822 00	32,065 00	160,000 00
1900	101,448 00	13,562 50	10,589 00	33,203 00	158,802 50
1901	101,024 50	13,420 50	8,335 50	33,161 50	155,942 00
1902	100,455 70	14,555 80	8,716 55	36,125 45	159,853 50
1903	99,714 15	14,872 75	9,652 50	34,704 30	158,943 70
1904	99,286 44	15,110 80	9,179 35	33,651 65	157,228 24
1905	100,664 35	15,379 50	8,317 20	34.185 60	158,546 65
1906	99,518 80	16,247 55	8,839 40	34,410 00	159,015 75
1907	93,381 70	16,454 50	10,175 95	36,102 35	156,114 50
1908	98,156 20	17,203 75	9,708 90	34,931 05	159,999 90
Totals	2,710,218 23	414,421 02	272,445 42	868,731 00	4,265,815 67

List of Vessels which received Fishing Bounty in the Year 1908-09.

# PROVINCE OF NOVA SCOTIA.

#### ANNAPOLIS COUNTY.

Official Number.	Name of Vessels.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
121118 96759 107342 112315 122241	Albert J. Lutz Charley Troop Harry C. Ellis Mabel T Margaret Leonard	St. John Yarmouth St. Andrews	95 30 16 13 37	John D. Apt	Margaretville Hillsburn Port Wade	5 3	\$ ets.  210 50 44 50 52 25 34 75 124 00
		ANTIG	ON	ISH COUNTY.			
103542 111798	Emma Brow Marie C	Halifax	17 18	Jno. J. Brow Jno. Munroe	Hbr. au Bouche. Auld's Cove	2 3	31 50 39 75
		CAPE	BRE	TON COUNTY.	,		
112376 100389 100372 99834 100383 112380 116883 122186 121940 117114 122117 107375 100816 111799 107376 111902 112386 122184 107359	Agnes Annie F Betsy Jane. Diego Florence L. Florence M Grayling M. O'Toole. Manetto Mary E. Falkner. *Millie. Minnie B. Mattie Morrissey. Rosie G Rozzie. St. Thomas Shamrock Two Brothers. Victoria	Sydney. Port Medway. Sydney. Arichat. " Halifax. Sydney. Canso. Pt. Hawkesbury. Sydney. Arichat. Sydney. Arichat.	10 25 25 32 21 14 13 10 21 16 17 10 11	Wm. Martell John Farrell Samuel Moore. Thos. Peach Jno. Campbell D. H. McKay Geo. Herridge Vincent O'Toole Frank Forward Angus Nicholson Jno. F. Carey G. Billard R. D. Nutter Jno. Gallant R. Fudge. Alexr. Lee Sr Jacob Rogers P. Campbell Benj. Boon	Glace Bay. North Sydney. Louisburg Lingan. North Sydney.  "Louisburg. Big Glace Bay. L. Lorraine. N. Sydney. L. Lorraine. North Sydney. Mainadieu.	3 4 7 2 4 3 3 12 3 4 4 6 6 3 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	44 00 34 75 40 00 77 75 24 50 54 00 46 75 53 75 108 00 35 75 42 60 49 25 39 00 53 00 59 50 38 75 40 00 55 25 54 50
A. C.		CUMBI	ERL.	AND COUNTY.			
111425	Effie Howard	Halifax	23	E. R. Heather	Pugwash	5	59 25
	,	DIe	GBY	COUNTY.			
	Alart	St. John Digby Barrington Digby Varmouth	11 52 16 48 14 24 22 29 64	Norman Robbins Crawford Daly	Digby Freeport Tiverton Freeport Tiverton. Culloden. Westport	4 8 5 13 5 6 2	25 50 40 00 110 00 52 25 142 25 50 25 67 50 36 50 94 25 187 25

# List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

#### DIGBY COUNTY—Concluded.

		DIGBY	COU	NTY—Concluded.			
Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
103181 77740 103749 116446 121657 107604 111527 88276 11232 122249 122097 111683 111530 116234 111525 111838 122571 122141 122141 121816 116237 111836 85533 116232 116660 111835 111840 100609 103179 94694 121812	Nettie M Nora Roxana.	Yarmouth Weymouth Digby St. Andrews. Digby St. Andrews. Yarmouth. Shelburne Digby.  "" Yarmouth. "" Uigby. "" Yarmouth. "" Uigby. "" "" "" "" "" "" "" "" "" "" "" "" ""	63 15 29 47 11 20 10 12 20 14 13 71 29 10 14 18 18 18 12 12 11 12 12 11 12 12 11 12 12 12 13 14 14 15 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	Geo. Denton. Jno. W. Snow. Syda & Cousins Edwin Hains. Alb. Thompson. F. S. Doucette Jas. Buckman. Ansel Casey J. A. Moore G. E. Farnsworth. Jos. J. LeBlanc. E. P. Greenwood. George C. Stevens Esrom Thurber. WhaleCove Trading Co. J. F. Milberry. Jas. Doucette. Michael Comeau. Lezine Boudreau. Lezine Boudreau. Lezine Boudreau. Jos. E. Snow. Herbert Bailey. Moses Thibodeau Stephen Haynes Wm. McDorman. Philemon Doucette. Wm. W. Gower. Moses Theriault. Edwin Hains Frank S. Lent. Edwin Hains. John W. Snow.	Digby Mavilette.  "" Salmon River. Digby Westport. Church Point. Digby Westport. Mavilette. Westport. Meteghan Freeport. ""	12 4 6 3 5 2 8 8 8 8 3 4 2 5 4 2 16 4 7 5 12 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	\$ cts.  157 25 36 75 36 25 36 25 31 40 00 40 00 63 50 31 75 48 25 27 50 129 00 87 00 31 75 43 00 80 00 54 25 47 00 26 50 196 00 39 00 65 75 48 25 33 75 48 25 33 75 48 25 40 00 64 25 143 00 96 25 98 25 109 00
107992 116344 112021 122185 112016 112020 112375 96825 117060 103332 117053 117053 117053 117053 117053 117059 100418 107996 109815 122430 117091 103470	Annie M. Beatrice Blanche Bonny Kate C. G. Munroe. Cecelia. Cora Lee. Dannie Goodwin. Dorothy Aleta Ella May Emma Jane Ethel. Florence D. Florence May Flying Cloud. Fortuna. Geneva Ethel. Green Linnet Happy Home Hattie Maud Hazel Maud	Canso Arichat Canso Arichat Canso Arichat Canso  Arichat Halifax  Canso  Pt. Hawkesbury Canso Arichat  Canso Barrington Canso Barrington Halifax  Canso Barrington Halifax	20 18 29 11 12 14 16 21 11 34 16 11 11 11 11 13 14 16 11 11 11 11 11 11 11 11 11	Joseph Ryan Mark Richard Mark Richard Rory Sutherland Vincent Richard Jas. H. Pelrine Harvey Munroe Fish Ltd Wesley Munroe Hibbert Carr John George Jas. Slnclair Wm. Digdon John Kennedy Simon Manett John Cousins Martin Meagher Thos. Boudrot, jr. Samuel Snow Jno. J. Berrigan Jas. A. Rhynold	Queensport Canso Charlos Cove Canso Charlos Cove Larry's River White Head Mulgrave Up. White Head Canso White Head Canso White Head Canso Unite Head Canso Up. White Head Canso Larry's River Up. White Head Dover Up. White Head Dover Up. White Head Canso Dover Up. White Head Canso Dover Up. White Head Canso Dover	4 4 3 5 5 6 6 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5	56 25 47 00 58 00 32 75 48 25 50 -25 57 50 84 50 52 25 21 00 32 75 52 25 32 75 32 75 42 00 50 25 58 00 58 46 25 54 62 54 62 54 54 62 54 62

# LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

#### GUYSBORO COUNTY-Concluded.

	Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name or Owner or Managing Owner.	Residence.	No. of Crew pard.	Amount of Bounty paid.
the	116/4/ 111910 117097 100835 117100 116919 117094 112018 117056 126291 111909 112371 116886 11475 107999 107757 112024 112024 11203461 108000 107318 112023 116884 112025 116885 117055 117055 117055 116532 106319 107994 107995	Lottie M. Beatrice Louisa Ellen Madeline Maggie Alice. Maggie Alice. Maggie Bell Margaret Margaret Kathleen Margaret May Mary A Mary J. Mary Matilda Maud S Mayflower Morning Glory Muriel G Reta S River Swan St. Lidwina St. Patrick St. Stephen Silver Bell Silver Swan Squanto Sunrise T. Lilly Thelma Trush Togo Trilby True Love Utowana.	Halitax Arichat.  "Lunenburg. Arichat. "Liverpool. Arichat. Canso. "" "" "Canso. Charlottetown Halifax. Canso. "Arichat. "" "" "Arichat. "" "" "" "" "" "" "" "" "" "" "" "" ""	111 166 112 266 166 122 111 111 155 122 181 111 118 119 144 120 131 144 121 101 151	E. G. Hendsbee. Chas. A. Mosher Jacob Manuel, jr Jos. H. Richard Benj. L. Pelrine Chas. Richard Hiram Hendsbee, sr. Daniel Casey. Geo. Berrigan John D. Cashin Jas. W. Grady. Geo. Matthews. Patk. J. Conway S. C. Richard Daniel Pitts Whitman Fish Co. Ltd. Frederick Pelrine Havelock Munroe Jas. R. Lumsden Jno. J. Gerrior Jno. S. Wells. Wm. Shrader Chas. Stanton. Abner J. Munroe. Geo. L. Avery. Moses Cohoon Simon J. Pelrine Chas. H. Richard Frank H. Hawes Thurlo Munroe. Geo. Grover Alex. M. Roberts D. Sproul & Co. Jas. Lukeman John Boudrot. David Walsh Frank C. Lohnes.	Charlos Cove Larry's River. Dover Half Isl'd Cove White Head. Canso Port Felix. St. Francis Hor. Canso Cove  Canso Larry's River. White Head. Charlos Cove  Larry's River. White Head. Canso Larry's River. White Head. Canso Larry's River. Cole Harbour. Larry's River. Canso. Larry's River. Charlos Cove. Canso. Lr. White Head Canso.  "Hazel Hill. Dover Canso.	5 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	\$ ets.  39 75 60 50 41 00 54 50 41 00 48 25 46 00 47 25 45 00 47 25 52 25 52 25 52 25 52 25 47 25 11 00 48 25 47 25 11 00 40 75 54 75 61 50 40 75 57 50 63 50 42 00 54 25 57 50 63 50 42 00 54 25 55 50 31 75 15 00 39 00 50 25 55 50 31 75
	116887	Wenona	Arichat	10 IFA	John UlothX COUNTY.	Cole Harbour	3	31 75
	100247 100259 116290	A. C. Greenwood. Adelaide. Albata. Alice A. Annie G. W. Annie May. Condor. Dove. Duchess. Edith L. Ella May. Ena T. Ermynthrude. Etha May. Fairy Queen. Florence G. Flora M. J. Gladys Elena.	Shelburne. Lunenburg  Halifax  " Digby Halifax Lunenburg Lunenburg	15 13 20 16 17 24 20 10 12 26 57 17 36 11 11	Ernest Mason. Jas. F. Gray. Henry Wynaught Wm. McPherson Jas. Westhaver. John A. Gerrard Geo. Julien, et al. Geo. Myrer, et al. David Morash. Maynard Young Ainsley Hubley Herbert Little. Geo. A. Darrach Geo. Johnson. G. H. Nickerson. Caled Gray. Jas. Julien, et al Chas. Twohig.	Pennant. Hackett's Cove. Tangier. Sober Island. Gerrard's Island Grand Desert. Petpeswick Hbr. West Dover. Hacket's Cove. Terence Bay. Herring Coye. West Dover. Pennant.	10 4 3 3	51 25 34 75 56 25 37 75 46 00 67 50 34 50 48 25 47 75 151 25 67 75 108 50 40 00 32 75 36 75 208 50 45 00

List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con. .

### HALIFAX COUNTY-Concldued.

		HAMIF AZ		UNTY-Concldued.			
Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
					m D		\$ ets.
108544 111747 116731 116738 116287 112129 116740 121934 100216 96797 116203 116513 126132 111440 116733 111435 111421 117150 85664 100227 116749 116282 103539 116282 103539 116282 10354 116749 116272 103464 122307 112317 11438 11242 11438 11440 116739 116282 10354 11627 11627 11637 11647	Grace D. Grace Darling Grand Desert. Cretta. Handy Andy Hattie. Hilda M. Horton Jeannie & Annie. Katie M. Laura Pheobe. Laurie H. Lottie V. M. M. A. Josey Maggie May Maggie Wilson Maple Leaf. Marie Stella Mary E. May Minnie M Dora Monica A. Thomas Neva. Perseverance Pleroma Progress Reliance Rosie M. B St. Patrick. Sadie H. Stanley Hubley Theresa M. Gray Uncas Villetta Vixen	Lunenburg. Halifax.  " Lunenburg. Halifax.  " " Lunenburg Halifax  " " " " " " " " " " " " " " " " " "	65 14 15 12 29 16 11 18 16 16 16 17 17 35 36 14 10 10 11 11 12 25 36 14 10 11 11 12 27 11 11 11 11 11 11 11 11 11 11 11 11 11	Leander Hubley Daniel Bonang, et al. Harris Corkum Geo. Little Wm. Hubley Angus Gray A. W. Nickerson Harvey Covey Jas. H. Smith Henry McKenzie	Hacket's Cove. Grand Desert. Clam Harbour. Sober Island. Indian Harbour. Harrigan Cove. Tangier. Halifax. West Jeddore. Herring Cove. Terence Bay. West Dover Spry Bay. Ketch Hbr. Herring Cove. East Jeddore. Grand Desert. Indian Hbr. Terence Bay. Spry Bay. Herring Cove. East Jeddore. Grand Desert. Indian Hbr. Terence Bay. Herring Cove. Pennant. Indian Hbr. Sambro. Terence Bay. Indian Hbr. Terence Bay. Indian Hbr. Grand Desert. Indian Hbr. Terence Bay. Indian Hbr. Terence Bay. Indian Hbr. Terence Bay. Indian Hbr. Tennant. Sambro. Indian Hbr. Sambro.	18 3 5 3 3 4 4 4 7 10 7 9 3 4 4 2 10 13 13 16 16 16 16 16 16 16 16 16 16	39 00 188 75 195 50 35 75 51 25 33 75 50 75 45 00 32 75 54 25 74 00 52 25 74 00 67 75 101 25 39 00 46 00 67 75 35 75 35 75 35 75 35 75 35 75 35 75 35 75 45 00 56 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25 96 50 54 25
	J	INVI	ERN	ESS COUNTY.			
96778 103113 103325 96774 103317 111800 111795 103316 103315 96775 103330 96779 96777 103314 69125 111797	Lillie Louise Lucy Majestic Marie Marie Joseph Mary May Flower Mernaid	Halifax	10 11 11 11 12 11 10 12 11 11 12 10 11 10 11 10 20	David Bourgeois. S Bellefontaine.  John McNeil C. Robin Collas Co Magloire Poirier. S. Bellefontaine. Theophie Maillet. C. Robin Collas Co Elie Des Veaux, et al C. Robin Collas Co Peter Fiset. Hyacinthe Chiasson. Thos. Harris.	Belle Marche Eastern Hbr  Pt. Hawkerbury Eartern Hbr Plateau Eastern Hbr  Belle Marche Eastern Hbr  Little River Plateau	444444444444444444444444444444444444444	40 00 39 00 40 00 40 00 41 00 25 50 39 00 54 50 41 00 46 25 47 25 39 00 56 25 42 00

# List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

### INVERNESS COUNTY—Concluded.

Official Number.	Name of Vessel.	Port of Registry	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
100448 96773 111793 96776	Surprise	Pt. Hawkesbury	11 21	Daniel McDonnell C. Robin Collas Co S. Bellefontaine	11	2 4 4 4 4	\$ ets. 29 50 39 00 40 00 50 00
				1		10	010 70
111641 112115 112107 111647 112106 112101 116522 111737 116498 111734 126106 111732 112128 121999 116595 122316 111708 111708 111637 126033 111711 122002 116540 112099 83308 121994 107127 122318 121999 83308 121994 107127 122318 121999 11730 121865 122318 121999 11730 121865 122318 121999 11730 121865 122318 121999 122318 121999 122318 121999 123318 121999 123318 121999 123318 121999 123318 121999 123318 121999 123318 121999 123318 121999 123318 121999 122318 12199 122318 12199 122318 12199 122318 122	Acadia. Aguadilla. Aldine. Aldine. Alexandra Alhambra! Alma Nelson. Ambition. Anita Annie M. W Beatrice S. Mack. Blake Bonnie B. Calavera. Cavalier. Cavalier. Clintonia. Colonia. Confidence. Corean. Coronation Crofton McLeod. Cyril. D. C. Mulhall Defender Dolly Grey Douglas Adams E. M. Zellars Earl Grey Earle V. S. Eldora Ellectro Ella. Ella Mason Ellen L. Maxner Elsie M. Walters. Emma H. Ethel. Eva June. Evelyn Falcon. Flo F. Mader Forrester Gatherer.	Liverpool. Lunenburg.  Shelburne. Lunenburg.	99 93 88 99 100 16 16 98 99 99 90 13 70 96 88 85 100 70 98 85 100 70 98 88 85 100 100 100 100 100 100 100 10	Alexander Knickle Freeman Anderson A. V. Conrad. Freeman Anderson William Gilfoy John B. Young. Willet Conrad. Jno. Himmelman Egerton Ritcey. Wm- C. Smith. J. N. Rafuse. Percy Publicover. Abraham Ernst. Thos. Romkey. Richard Wilneff W. N. Reinhardt. Wm. C. Smith. J. N. Rafuse. Percy Publicover. Abraham Ernst. Thos. Romkey. Richard Wilneff W. N. Reinhardt. J. N. Rafuse. H. W. Adams. Jno. W. McLean W. N. Reinhardt. Joseph Conrad. Alex. Knickle Samuel Knock H. W. Adams. Henry Moser E. F. Zwicker John B. Young Amiel Corkum Edmund Walters Jennis C. Hanson Isaac Mason Lewis A. Hirtle. W. N. Reinhardt. W. N. Reinhardt. W. N. Reinhardt. Jonnis C. Hanson Lewis A. Hirtle. W. N. Reinhardt.	Parks Creek Lunenburg  " Riverport Rose Bay Riverport Lunenburg Conquerall Bank Blandford Mahone Bay Riverport Lunenburg La Have Lunenburg  La Have Lunenburg La Have Lunenburg La Have Lunenburg La Have Lunenburg Lahave Lunenburg Kingsburg Lunenburg Lunenburg Lunenburg Lunenburg Kingsburg Lunenburg Lunenburg Coakland Lunenburg Lahave Lunenburg Lahave Lunenburg Lahave Mahone Bay Lahave Lunenburg Lahave Rose Rose Rose Rose Rose Rose Rose Ros	10 17 5 11 15 21 17 18 17 17 18 17 17 19 17 16 19 17 16 19 17 19 17 19 17 19 17 19 19 19 19 19 19 19 19 19 19 19 19 19	210 50 203 25 210 50 203 25 210 50 203 25 203 25 203 25 203 25 217 75 45 00 203 25 217 75 55 25 152 50 203 25 178 75 232 25 93 00 193 25 138 00 203 25 149 25 188 75 203 25 188 75 203 25 189 75 203 25 189 75 203 25 189 75 203 25 189 75 203 25 189 75 203 25 189 75 203 25 189 75 203 25 189 75 203 25 189 75 203 25 203 25 203 25 203 25 207 75 207 25 208 25 208 25 209 209 209 209 209 209 209 209 209 209
121851 121867 111742 103752 111507 122316 116527	Gladys B. Smith. Gladys F	0 0 0	72 99 99 76 79	J. N. Rafuse. J. E. Backman Wm. C. Smith Lambert Lohnes Abraham Ernst. W. N. Reinhardt. Reuben Ritcey	Conquerall Bank Riverport Lunenburg E. M. La Have Mahone Bay Lahave	17 18 17 14 11 18	195 25 210 50 203 25 177 50 158 75 203 50 203 25

# List of Vessels which received Fishing Bounty, &c.--Nova Scotia — Con.

# LUNENBURG COUNTY—Continued.

		HOTTELLOCA					
Official Number	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
				-			\$ cts.
116442 122005 121857 121993 103174 112089 107116 121858 107960 111726 111404 126101 107660 107129 103760 111735 126104 107120 1116523 116533 116538 121862 111709 121854 121866 121861 121864 121865 122007 111701 116535 111645 122007 111701 116530 112104 112106 112120 111648 107125 121869 111402 111648 107125 121869 111402 111648 107125 121856 121991 126034 111741 116529 107963 122303 116746 111793 111636 111793 111636 111793 111636 111793 111636 111791 116636 111791 116636 111791 116636 111791 116636 111791	Helen C. Morse Henry L. Montague Hiawatha Hilda M. Backman Iona Iona W. Ivy J. A. McLean J. W. Mills Juanita Kimberley Lantana Lila D. Young Lilla B. Hirtle Lilla B. Hirtle Lillian Lucania M. Unity Madeira Maimie Dell Mankato Maple Leaf Marina Mariner May Myree Medina A. Mildred M. Bell Millie Louise Minnie M. Cook Minnie M. Mosher Minnie M. Mosher Moran Moran Muriel M. Young Nina Oregon Oressa Belle Palatia Petite Protector Riviera Roma Ronald G. Smith Rupert Russel H. Pentz Saratoga Scotia Shamnock Shamnock Shamnock Shamnock Shamnock Shamnock Srathcona Transvaal Tribune	Halifax Lunenburg  """  """  """  """  """  """  """	96 99 81 15 78 12 80 76 100 92 17 100 99 84 99 98 87 78 100 100 96 89 73 80 80 81 80 80 76 80 80 80 80 80 80 80 80 80 80 80 80 80	John Westhaver Wm. C. Smith.  Willet Conrad Herbert Thomas Abraham Ernst. Samuel Zellars. C. A. Anderson J. W. Mills. Wm. C. Smith C. U. Mader. David Langill John B. Young C. A. Anderson Allan R. Morash Reuben Romkey Obediah Fleet Theophilus Creaser C. U. Mader Edmund Walters Mahlon Rodenhizer A. V. Conrad Cyrus W. Parks E. F. Zwicker Elias Richard, sr Amiel Corkum Wm. Richard Abraham Ernst C. E. Backman Wm. Duff John B. Young J. A. Silver Elijah Richard, jr John B. Young Howard Wynacht Eleazer Zfnck Obediah Richard Arthur Creaser P. B. Zwicker Chas. L. Silver Daniel Lohnes J. D. Sperry J. N. Rafuse Andrew Ross J. D. Myra Wm. C. Smith J. N. Rafuse Andrew Ross J. D. Myra Wm. C. Smith J. N. Rafuse Andrew Ross J. D. Myra Wm. C. Smith J. N. Rafuse Andrew Ross J. D. Myra Wm. C. Smith J. N. Rafuse Andrew Ross J. D. Myra Wm. C. Smith J. N. Rafuse Andrew Ross J. D. Myra Wm. C. Smith J. N. Rafuse Andrew Ross J. D. Myra Wm. C. Smith J. N. Rafuse Andrew Ross J. D. Myra Wm. C. Smith J. N. Rafuse A. V. Conrad C. U. Mader D. M. Harrington Freeman Anderson Jas. Bell Albert Courad Freeman Anderson Wm. C. Smith Wm. C. Smith	Riverport Pleasant Point Pleasant Point Mahone Point Feltzen South Lunenburg Mahone Bay Lunenburg Martin's Brook Lunenburg Martin's Brook Lunenburg Martin's Brook Lunenburg  Riverport Blandford Riverport Blandford Riverport Mahone Bay Lahave Lunenburg Parks Creek Lunenburg Getson's Point E. M. La Have Getson's Point Mahone Bay Riverport Lunenburg Lunenburg Lunenburg Getson Point Lunenburg Lunenburg Lunenburg Lunenburg Corquerall Bank E. M. Lahave Riverport Petite Rivière Conquerall Bank E. M. Lahave Riverport Lunenburg Conquerall Bank Parks Creek Mahone Bay Bridgewater Lunenburg Conquerall Bank Parks Creek Mahone Bay Bridgewater Lunenburg Dublin Shore Rose Bay Lunenburg	18 17 22 15 16 17 19 17 15 16 20 19 18 19 5 17 16 17 17 18 10 17 17 17 17 18 17 17 18 17 17 18 18 18 19 18 19 19 19 19 19 19 19 19 19 19 19 19 19	210 50 225 00 29 50 196 00 29 50 186 75 48 25 188 75 177 50 210 50 217 75 203 25 62 25 203 25 62 25 203 25 62 25 210 50 182 75 170 00 223 50 182 75 170 00 223 50 182 75 170 00 223 55 217 75 196 00 225 203 25 217 75 196 25 217 75 210 50 210 50 210
122306 107957 121868	I ndaunted. Ungava. Utowana	- 41	. 15 88	Thos. Knock Wm. Clevercey	Kingsburg Pleasantville	5 21	51 25 232 25 201 50

# List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

# LUNENBURG COUNTY-Concluded.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew. paid.	Amount of Bounty paid.
117143 126105 116504 111649 121852 112127 111419	Uranus	Halifax Lunenburg	90 11 86 97 100 99 98 97 16	Wm. C.Smith. E. Conrad. Wm. C.Smith. K. L. Silver. C. U. Mader. Abraham Ernst. P. B.Zwicker. Elijah Rittey. Jno. Spindler	Rose Bay Lunenburg Dayspring Mahone Bay  " Riverport	17 22 15 20 15 17	\$ cts. 203 25 40 00 203 25 239 50 188 75 225 00 188 75 203 25 45 00
		PIC	TOU	U COUNTY.			
107330	Gertie M. Star	Halifax	16	Peter Roberts	Pictou	2	30 50
	<u> </u>	QUI	EEN	S COUNTY.			
· 116583 116715	Louisa A Maggie and Esther	Liverpool	10	Walter Fraser Reuben J. Colp	Port Mouton	4 2	39 00 25 50
	3	RICH	(MO	ND COUNTY.			
122301 116657 103463 111472 75561 74100 96799 59484 116343 80829 116348 88599 117049 100161 111476 100490 100538 83097 122183 103469 117092 107374 111901 112377 116350 116345 111479 116345	Indiana Irene M. B. J. E. Collins Joseph Ann Justina Katie B. Lady Laurier Lass of Gowrie Leah Hardy Lena Jane Lillian Louise Lilly May Maggie F. Mary Alice Mary Atalanta.	Yarmouth. Arichat  Lunenburg Arichat.  Halifax  Arichat.  Barrington Pt. Hawkesbury Arichat.  Lunenburg Halifax Pt. Hawkesbury Arichat.  ""  Sydney Arichat.	26	Thos, A. Boudrot. Chas. Boudreau. Wm. J. Martell. Edward Poirier James Kehoe. Jno. D. Malcom Thos. Hureau. Frederick Poirier Placide Bouchard Henry Richard Isaie Boudreau. John Burke. S. A. Boudrot Jos. Petitpas. Peter Landry Dominique Boudrot. Chas. P. Boudrot. Henry Fougere. Henry Fougere. Patk. Fougere. Patk. E. Sampson Alb. Samson	Fetit de Grat. Strait of Canso Petit de Grat. Port Richmond River Bourgeois Cannes Descousse Cannes Petit de Grat. River Bourgeois Petit de Grat. Goulet Arichat Port Malcom Cape Auget. Descousse River Bourgeois Arichat Cannes River Bourgeois Arichat St. Peter's Petit de Grat Petit de Grat Arichat St. Peter's Petit de Grat River Bourgeoi Lardoise Lardoise Lardoise River Bourgeoi	2 5 5 2 7 7 3 3 1 1 1 1 3 8 8 1 1 1 6 6 5 1 1 1 2 2 2 5 5 5 5 5 5 5 5 5 5 5 5 5	47 00 51 25 31 75 29 50 31 75

# List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

### RICHMOND COUNTY-Concluded.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
116881	(Mony M	Aviolat	01	- W			\$ cts.
103462 72067 111907 111904 85562 92571 88504 117095 116889 112108	Mary M. Maud. Minnie. Minnie A. Minnie I. Oresa. Primrose Quickstep. Rodrid Grace. Saint Dominique. Speculator.	Hawkesbury Arichat. Halifax. Sydney. Arichat.	46 15 14	Alex. Martell Henry Duon Jno. Pelham Anselm Sampson Elias Bois Jno. F. Proctor. E. V. Landry Jas. Wilkie Hubert Birette N. Marchand	Cape Auguet Janvrin Island . River Bourgeois. Petit de Grat Petit de Grat Arichat Lardoise Petit de Grat	4	42 75 49 00 62 25 125 75 44 00 14 00 50 25 58 50 38 75 57 25 210 50
103460 111794 116292 100812	Two Brothers	Arichát	18 14 13 25	Jno. Murphy	Petit de Grat	6 5 3 3	61 50 50 25 34 7 46 7
		SHELE	BUR	NE COUNTY.		!	
121890 100612 116824 116824 122102 122453 107051 116855 121806 122288 90434 121886 121654 122094 116826	Bernice N Bertha A Bertha A Bertie C Blanche Blanche C Buema C Buema C Buema Carrie D Charles E Clara M Claremont A	Shelburne. Yarmouth.  Shelburne. Burrington.  Yarmouth.  Barrington. Shelburne. Yarmouth Shelburne. Barrington. Yarmouth Shelburne. Barrington. Yarmouth.	10 12 12 10 12 13 12 10 36 33 10 13 10	R. J. Amero Jas. M. Crowell Wm. L. Smith Eleazer Crowe Peter Kenney Frank Swim Jno. C. Nickerson Thos. Ross Thos. D. Crowell Churchill Locke R. Nickerson Herbert R. Swim Chas. A. Goreham Thos. Duncan Ephraim Larkin Fred. C. Smith. J. G. Nickerson	Wood Hbr Lockport Stoney Island Baccaro M. W. Pubnico. Smithville Baccaro Sandy Point Clark's Hbr Up. P't LaTour. Shag Hbr Lockeport Woods Hbr Lockeport Woods Hbr Lockeport Woods Hbr Clark's Hbr Emerald Isle Newellton Clark's Hbr	3 2 4 4 3 7 3 4 6 4 4 4 3 4 4 3 5 5 5 3 7 6 3 4 2 3	31 7 24 50 42 00 40 00 31 75 78 75 32 75 39 00 58 50 39 00 42 00 39 75 41 00 33 75 41 00 33 75 49 25 31 75 86 75 76 50 31 75 42 00 31 75 42 20 31 75 42 20 32 75
121681 122462 121683 121910 107057 121882 121791 116330 122570 122470 121884 121909 122235 122467	Claymore Daniel S D. E. Nickerson Defender Dollie Varden Dorothy Eddie C Edith Pauline Edna M Elva Belle Emma B Emma G Ena A	Yarmouth Barrington Yarmouth Barrington Yarmouth	10 10 10 53 10 10 10 10 11 11 11 10 12	D. A. Gardiner. Albert Ross. Freeman Butler. Paul E. Crowell Freeman Atwood Lloyd H. Smith. Chas. D. Cook Reuben Swim Wm. Halliday Elam Thomas Walter S. Ross. Vincent Nickerson Jethro Newell Oscar Gardiner S. E. Countaway	Stoney Island Sandy Point Barrington Pas. Atwoods Brook. Baccaro Up.Port La Tour Clark's Hbr Bear Point Cape Negro Stoney Island West Head Newellton	3 3	31 75 31 75 31 75 31 75 147 25 24 50 31 75 39 00 32 75 40 00 32 75 41 00 29 50

# List of Vessels which received Fishing Beunty, &c.—Nova Scotia—Con.

# SHELBURNE COUNTY—Continued.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
121688 122137 121796 103795 121901 117048 121804 122106 122575 117045 121697 121697 121697 121697 121248 122463 122463 122574 121797 90647 121805 122139 122106 122239 126185 129237 107060 122239 126185 129237 117131 122454 121904 116853 116822 121188 117133 116823 121692 122138 117133 116823 121692 122138 117133 116823 121692 122138 117133 116823 121692 122138 117133 116823 121682 1211888 100326 12185	Florence M. Fly Fred C. Fredda N. Nickerson Freddie M. Fredena G. M. Stephens. Genevieve. Georgie M. Smith. Gertrude. Gladiator Gladys. Gladys. Gladys M. Gladys M. Gladys M. Gladys M. Hattie & Ina. Hattie Emeline. Hattie Quinlen Hazel. Helen and Hilda. Helen Davis Helen Glenn. Helen Band. Helen Glenn. Helen Maud Hilda Brannen. Hillside Ida M. Clarke Ilona & Ida. Industry. Iona and Maggie. J. J. Cox Jennet Jennie L. Jennie Roy Jessie Roy Josephine Katie M. Kestrel Kuroki La Rose Laura B. Lena Lila A.	Shelburne. Barrington Yarmouth Lunenburg. Yarmouth Barrington  " Yarmouth Barrington  " Shelburne. Barrington Yarmouth Barrington Yarmouth Barrington Yarmouth Barrington Yarmouth Barrington Yarmouth Barrington  " " " " " " " " " " " " " " " " " "	10 98 11 10 10 98 11 10 10 10 11 11 11 11 11 11 11 11 11	Wm. McMillan. Wm. N. Madden. Curtis Atwood Whitman Ross. R. L. McCarthy. Thos. A. Kenney. Jas. A. Smith. Leslie Smith. Job A. Crowell. Fred N. Newell. Clifford Reynolds. (Geo. A. Cox Judah A. Newell. Noah Abbott. M. Atkinson. Avert D. Smith. H. Atkinson.	Lunenburg West Head. Cape Negro West Head. N. E. Point. Clark's Hbr Lockeport Woods Hbr Yarmouth Forbes Point. Jordan Bay. Shag Hbr N. E. Point. Up.Port La Tour South Side. N. W. Harbour. Cape Negro Isld. Clark's Hbr Pear Point. Port Saxon Woods Hbr Stoney Isld Jordan Bay. West Head Barrington Pas Woods Hbr. Forbes Point. Lockeport. Baccaro. Oak Park. Stoney Island. Shelburne Clark's Hbr. Port La Tour Baccaro. Clark's Hbr. Port La Tour Baccaro. Clark's Hb. West Head Baccaro. Shelburne Newellton. Forbes Point. Clam Point. Newellton. Stoney Isld Woods Hbr. Forbes Point. Clam Point. Newellton. Stoney Isld Woods Hbr. Stoney Isld Shelburne Newellton. Shelburne Newellton. Stoney Isld Woods Hbr.	4 4 4 2 2 2 5 5 4 4 4 4 2 2 2 5 5 5 4 4 4 4	31 75 40 00 31 75 39 00
122098 121880 103790 122140 121790 116829 121888 126180	Mabel C Mabel Denvers Mabel L Mabel V Maple Leaf Margaret	Barrington Shelburne Yarmouth Barrington Yarmouth	10 14 10 10 11 10 11	A. Nickerson Fred Sholds Harry Banks D. V. Smith Henry F. Snow Alex. Phillips, sr. Jno. Crowell	Stoney Island. Up.Port La Tou Shag Hbr. Clark's Hbr. Villagedale. Clark's Hbr.	. 4 r 7 4 . 3 . 2 . 1	64 75 39 00 31 75 25 50 17 25 25 50

# List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con. SHELBURNE COUNTY—Concluded.

		SHELBURI	Y.E.	GOUNTY—Concluded.			
Official Number.	Name of Vessel,	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
83434 85583 126183 121879 117043 103057 1129234 116536 122231 121905 116854 121687 122103 103800 122457 117132 122136 121893 122168 122181 122233 122466 117044 121084 122108 103783 117046 116825 122091 117042 121894 1211894 121296 116845 122107 121699 121894 1212107 121699 121894 1212107 121699 121894 1121269 121894 1121269 121894 1121269 121894 1122107 121699 121894 11222462 121066 77744 117042 122150 122464	Monitor Muriel S. Nellie I. King. Nema & Millie Nema & Millie Nema & Millie Nema D Nyctia. Ocean Belle. Ocean Spray Olive R. Orinoco Quick Step. R. G. Hervey. R. H. Milford Raymond C Reginald R. Rilla May. S. B. Millard Seaton L Seretha Springwood. Thelma B Thelma E Thistle Thomas H. Three Brothers Three Sisters. Togo Twin Sisters Two Sisters Two Sisters. Tuna	Yarmouth. Shelburne. Yarmouth. Barrington Yarmouth. Barrington Lunenburg Barrington  Shelburne. Yarmouth.  Shelburne. Yarmouth.  """  Barrington Shelburne. Yarmouth.  Barrington Shelburne. Yarmouth.  Barrington Yarmouth. Barrington Yarmouth. Barrington Yarmouth. Barrington Yarmouth.  Shelburne Barrington Yarmouth. Barrington Yarmouth. Shelburne Barrington Yarmouth. Barrington Yarmouth. Barrington Yarmouth. Shelburne Barrington Yarmouth. Barrington Yarmouth. Shelburne Barrington Yarmouth.	20 13 11 10 12 12 11 13 14 16 10 10 11 18 11 18 10 10 10 11 11 18 10 10 10 11 11 18 10 10 10 11 11 18 10 10 10 11 11 18 10 10 10 11 11 18 10 10 10 11 11 18 10 10 10 11 11 11 11 10 10 11 11 11 10 10	Geo. H. King Sanford Slate Jas. C. Brannen Edgar Adams F. L. Perry Chas. Atkinson. Swim Bros Winslow Buchanan C. Maxwell Alex. Phillips, jr. I. S. Newell Robt. L. Newell Robt. L. Newell Thos. E. Worthen L. J. Nickerson M. G. Nickerson M. G. Nickerson M. H. Samuel Atkinson Wm. McMillan Benj. Cunningham Jos. Mahaney Robt. H. Brannen F. S. Nickerson Thos. I. Newell W. H. Penney E. C. Locke O. D. Smith Bert Chetwynd.	Lockeport. South Side. Churchover. Stoney Island. Clark's Hbr. West Head. N. E. Point. Lockeport. Hawk. Woods Hbr. Clark's Hbr. South Side. Stoney Island. N. E. Point. Woods Hbr. Port Saxon. Stoney Island. Port La Tour	6 5 5 3 3 4 4 3 3 3 8 4 4 2 2 4 4 4 3 3 4 4 4 4 4 3 3 4 4 4 4	\$ cts. 49 25 32 75 31 75 41 00 33 75 42 00 28 50 42 00 28 50 42 00 28 50 40 00 31 75 39 00 40 00 31 75 39 00 41 00 36 75 39 00 41 00 37 75 85 25 33 75 39 00 42 00 61 50 39 71 20 00 61 50 39 71 20 00 61 50 39 00 61 50 39 00 61 50 39 00 61 50 39 00 61 50 60 50
103183 116449	Wren Zephyr	Shelburne		Samuel Greenwood	Diack I offit	3 4 4 4	31 75 51 00 40 00
		VICI	JIII	A COUNTY.			
117028 112388 126023 122120 167355 117926 100444	Anna F Annie Amelia Ingonish Julia F. C Mary E Mary E. Daisley Stella May	" · · · · · · · · · · · · · · · · · · ·	14 13 16 12 10 16 12	Jas. Brewer Matthew Hawley Wm. C. Williams Thos. A. Young Allan McIntyre. Avery Daisley Simon Hawley	Ingonish Ferry . South Ingonish . Ingonish Ferry . Dingwall.	6 6 6 5 3 6	57 50 56 50 59 50 55 50 46 25 37 75 55 50

List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Concluded.

### YARMOUTH COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ ets.
121876 122132 116898 122579 121652 121698 121695 121685 1221699 103187 122573 107338 122145 121694 100605 116205 116205 121850 116205 121870 121871 121872 121872 121872 121872 121872 121872 121872 121872 121872 121872 121872 121872 121872 121873 121873 121873 121874 121461 121873 121874 121461 122455 121798 121699 121691 116894 122451 111877 122451 111877 122451 111877 122451 111877 122577 111877	Georgiana Glorianna Harry M. Johnson Henry L. Hilda Indianna. John L. Kenneth S. Kernwood Laura E. Laurie J. Lizzie A. Lizzie A. Lizzie E. Ludivica. Lydia L. Lydia L. M. F. Atwood Mabel M. Maccabee Marguerite. Mildred P. Nelson A. Olga A. Ospray Regine Retta E. Rosa Georgina Royal Sanford Selma	Shelburne. Yarmouth Digby Yarmouth Digby Yarmouth Digby Yarmouth Digby Yarmouth Digby Yarmouth Digby Yarmouth	67 12 10 15 16 16 12 16 15 17 72 90 10 11 14 10 10 10 10 10 11 14 15 20 16 16 16 17 17 10 10 10 10 10 10 10 10 10 10 10 10 10	Alex Boudreau. Brandford Lowe A. C. D'Entremont. Jas. Boudreau E. D. Boudreau E. D. Boudreau E. D. Boudreau E. D. Botteau E. D. Botteau E. D. Botteau E. D. Benj. C. Smith W. A. Killam P. C. Doucette E. J. D'Entremont. E. M. D'Entremont. E. J. Ellis H. T. LeBlanc Norman LeBlanc Jno. Surette Eben Frost Edison Ellis Jos. Atkins L. P. D'Entremont Hugh McManus Henry A. Amiro Benoit Pothier Chas. W. Foster T. A. D'Entremont Jas, E. Crosby Theo. Jacquard Geo. Boudreau W. A. Killam Leo Cotreau	Bourque Cove. West Pubnico. Tusket Wedge. Deep Cove Isld. M. E. Pubnico. Tusket Wedge. Yarmouth. Tusket Wedge. Yarmouth. Tusket Wedge. Yarmouth. Sandford. Yarmouth. M. E. Pubnico. Yarmouth. Tusket Wedge. Arcadia. Yarmouth. Tusket Wedge. Arcadia. Yarmouth. Tusket Wedge. Pinkney Point. Yarmouth. Tusket Wedge. Deep Cove Isld. West Pubnico. Tusket Wedge. West Pubnico. Tusket Wedge. Port Maitland. Tusket Wedge. Yarmouth. West Pubnico Yarmouth. Tusket Wedge.	8 3 3 4 4 4 3 119 4 4 3 110 20 0 3 16 4 4 20 1 1 5 5 4 4 1 1 7 7 6 6 4 4 1 1 7 7 6 6 4 4 1 1 7 7 6 6 4 4 1 1 7 7 6 6 4 4 1 1 7 7 6 6 4 4 1 1 7 7 6 6 4 4 1 1 7 7 6 6 4 4 1 1 7 7 6 6 4 4 1 1 7 7 6 6 4 1 1 7 7 6 6 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	36 75 37 75 40 00 32 75 78 00 32 75 78 00 31 75 31 75 39 00 40 00 32 75 31 75 39 00 40 00 31 75 39 00 31 75 39 00 31 75 39 00 31 75 39 00 31 75 39 00 31 75 39 00 121 50 224 00 31 75 30 50 41 00 51 25 239 50 71 25 239 50 71 25 239 50 71 25 72 50 73 39 00 17 25 73 39 00 17 25 73 30 50 74 50 75 30 50 77 50 78 50

List of Vessels which received Fishing Bounty, &c.—New Brunswick—Con.

### YARMOUTH COUNTY—Concluded.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
100313 121660 122135 121875 117138 121651 103716 122134 111659	Silver Spray. Souvenir Squanto. 10-U-8. Toronto Two Brothers. Valentina Valkyrie Venus Viola. Viola S Zilpha	41	71 11 16 13 11 10 11 10 11 10	Wilson Rankin Asa C. Atkins Jno. Surette P. A. Le Blanc	West Pubnico Tusket Wedge. Arcadia Deep Cove Isld. Pinkney Point. Tusket Wedge. Yarmouth Tusket Wedge. Surette's Island.	1 2 4 4 4 4 2 2	47 25 216 00 18 25 30 50 42 00 40 00 39 00 40 00 24 50 24 50 37 75 24 50

#### PROVINCE OF NEW BRUNSWICK.

# CHARLOTTE COUNTY.

00515	4.7	10	A.G.Matthews Letete 3	31 75
	Ada St. Andrews	10	A.G.MatthewsLetete3 H.H.CheneyWhitehead2	24 50
107913	Arnold B St. John		H. H. Cheney	43 75
94727	Aurena St. John	17	Geo. A. Johnson North Head 7	67 75
107903	Ava M St. Andrews	11		36 75
122250	Bonita "	15		28 50
116969	Cassie Belle	14	D.E. Cheney Whitehead 2 E.C. Justason Beaver Hbr 5	50 25
59373	Cassie Belle E. M. Oliver E. B. Colwell St. John	14	Anselm Wallace Black's Hbr 5	55 25
88253	E.B. Colwell St. John	19		39 25
103114	Edward Morse St. Andrews	32		51 00
103789	Effice B. Nickerson Shelburne			50 00
111522	ElizabethDigby		THE THE TECHNOLOGY OF THE PARTY	14 00
80882	Ella Mabel St. Andrews		Luke Holmes Beaver Hbr 2	25 50
1.00535	Fair Play   Yarmouth	11		31 75
103120	Falmouth St. Andrews	10		32 75
92511	Fleet Wing	11		34 75
111552	Flora B	13		37 75
107910	Grace and Ethel	16		60 25
116962	Happy Home	24		37 75
111839	Harry C Digby	16		31 75
122248	Hattle D St. Andrews	TO		40 25
83463	Havelock "Hazel L ""  Iolanthe "Island Girl "Jennie T "Jessie James "Lillian E "Little Nell "Maggie Jane "Majestic "St. John Meteor St. John			36 75
116677	Hazel L			47 00
122592	Iolanthe			53 25
103121	Island Girl			81 75
121591	Jennie T			32 75
103997	Jessie James		J. Frankland Whitehead 3 Mariner Johnson Beaver Hbr 3	34 75
88273	Lillian E			35 50
59321	Little Nell		Wm. McLellan Campobello 2 Chester Frankland Whitehead 3	32 75
122042	Lyla H			31 75
92514	Maggie Jane			33 75
111558	Majestic			
101002		53	J. E. Gaskill	
88402			Thos. Carter Seeley's Cove 4	
122044	Olive C St. Andrews	20	Garfield Cook Letete 3	
102000	Oronhyatekha " Pythian Knight " Rena F " Ripple St. John	10	Garfield CookLetete 3 Frank Ingersoll.North Head	
103993	Para F	19	Jno. Ingersoll Woodward's Cve 3	
110004	Dinale Ct Tohn	12	Sanford Brown Grand Hbr 4	
107909	S. B. St. Andrews	10	S. Bancroft Whitehead 1	19 25
122043				35 75
122040	Sea Foam	1 14	Training Green I wo islands 5	00 10

List of Vessels which received Fishing Bounty, &c.—New Brunswick—Con.

# CHARLOTTE COUNTY—Concluded.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence,	No. of Crew paid.	Amount of Bounty paid.
107433 59387 107440 103998 116970 100548 103111 111560 97149	Sir John Telephone Three Links Try Again Vigilant Violetta Volunteer W. C. Clark Winnie	0 0 0 0 10 10 10	11 19 12 15 12 11 14 16 12	J. E. Gaskill Robt. A. Main. A. W. Ingersoll. W. Cosseboom Albt. Tucker Geo. Ingersoll Arlington Joy	Seal Cove	5 2 3 2 4	\$ ets.  40 00 69 75 48 25 51 25 26 50 32 75 28 50 45 00 33 75

72099	Adelina	Chatham	12	P. D. Blanchard	Caraquet	4	41 00
			12	Alex. Frigault		4	41 00
103009	Adeline Gladys	11		Wm. Fruing & Co	11	4	42 00
103081	Albatross	11	13			4	39 00
112156	Albert W	11	10	P. Chiasson	T T	6	58 50
122057	Alice	11	15		L. Lameque		48 25
97194	Alika	11	12		Lameque	5	
112162	Alma	tt	12			4	41 00
103763	Alouette	11	10	Wm. Fruing & Co	Caraquet	4	39 00
92419	Anna	11	12	Jos. A. Chiasson	Lameque	4	41 00
100960	Annie M	11	11		Chatham	4	40 00
96739	Argeline	11	14	G. Lanteigne	Caraquet	5	50 25
103085	Argentina	11	12	C. Robin Collas Co	11	4	41 00
100983	Bee	11	11	Jas. Doucet		3	32 75
103072	Ben Hur		11	Jno. Leclerc		6	54 50
			10	G. Plourde		4	39 00
100975	Big Bear		12	Maxime Cormier		4	41 00
116474	Blanchard		10	C. Robin Collas Co		4	41 00
100299	Blanchard					4	42 00
103589	Blenheim			11		4	42 00
103780	Britannia			Wm. Fruing & Co	Obathana	5	48 25
100780	Britannic			W. S. Loggie Co	Chatham	4	42 00
111465	C. R. C	tt		C. Robin Collas Co		3	31 75
100988	Caesar	11		Philip Rive			33 75
100774	Calliope		12	11		3	
103271	Celia	11	11	Oliver Gionet		4	40 00
103585	Cerdric		14	Philip Rive	11	4	43 00
100784	Charlotte		13	F. T. B. Young	11	3	34 75
100789	Chazalie		11	11.1		4	40 00
96730	Christina		11	C. Robin Collas Co	11	5	47 25
101000	Condor		4.0	Wm. Fruing & Co	11	5	46 25
103083	Corsair		40	"	11	4	39 00
100016	Cygnet		10	C. Robin Collas Co	11	3	33 75
100971	Cyprian		10	J. O. Le Bouthillier		4	39 00
		11 1	3.0	Wm. Fruing & Co		3	31 75
100913	Daffodil		10	C. Robin Collas Co		3	33 75
100915	Dawn		10	W. S. Loggie Co		5	48 25
103076	Dipper		1 30	C. Robin Collas Co	Caraquet	4	41 60
103948	Dora		10	Seraphin Doiron	Miscon	4	39 00
112155	Dora		10	F. F. Chiasson	Island River	5	46 25
122053	Dorie,		-4-4	T. F. Chrasson	Cornected	3	32 75
100999	Dove	11		Wm. Fruing & Co		4	39 00
100998	Eagle		10	T T T	1	4	45 00
116979	Elie Anne			Jos. J. Doiron		0	36 75
100293	Eliza	11		F. T. B. Young		4	42 00
103590	Eliza	.] 11		C. Robin Collas Co	11		31 75
100911	Emperor		10	Wm. Fruing & Co	. 11	3	
100786	Empress			F. T. B. Young	11	4	41 00
103776	Esk						35 75
100772	Estelle		13	Philip Rive	11	3	34 75
100112	-2.000210	,					

List of Vessels which received Fishing Bounty, &c.—New Brunswick—Con.

# ${\tt GLOUCESTER~COUNTY-} {\it Continued}.$

Official Number.	Name of Vessel.	Port of Registry	Tonnage.	Name of Owner. or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
				-			\$ ets.
100787 122058 100905 92417 103001 103077 121900 122621 100298 61445 61445 111468 112165 100782 112151 116479 111467 100958 96733 108766 116980 103282 103086 111848 100910 107775 122491 112157 92418 100790 111819 100956 100994 107771 103765	Ethel Evangeline Evangeline Evangeline Falcon Falcon Fame Fannie W. Freeman Fillera Fisher Flavie Fleetwing Flying Cloud Flying Foam Flying Foam Fortuna Four Brothers Gambetta. Gazelle Gazelle Gem Genesta Georgina. Gilknockie. Gipsy Gipsy Gladstone Gleaner Goldseeker Godseeker Godseeker Godseeker Godseeker Godseeker Goding Star Happy Home Harold N Hercules Heron Hirondelle	Shelburne. Chatham.	11 10 10 10 10 79 18 12 13 12 18 10 13 11 11 12 12 15 11 12 11 12 13 13 14 11 11 12 15 16 16 16 16 16 16 16 16 16 16 16 16 16	Gilbert Duguay. F. T. B. Young. W. S. Loggie Co. Wm Frung & Co. J. N. Le Bouthillier. L. Lanteigne. C. Robin Collas Co. Jos. J. Boudreau Philip Rive Gust. Chenard. F. T. B. Young Philip Rive P. F. Maillet. P. M. Lanteigne. Wm Frung & Co.	Mizonette Caraquet Lameque, Caraquet. Shippegan Caraquet. Lameque.  Caraquet. Caraquet. Shippegan Caraquet. Chatham. Caraquet. Chatham. Caraquet.  "" L. Lameque Caraquet. Chatham. Caraquet. Chatham. Caraquet. Chatham. Caraquet. Chatham. Caraquet.  "" "" Shippegan Caraquet.	3 4 4 5 6 6 4 4 0 5 5 5 3 4 4 4 4 4 3 5 4 4 4 4 3 5 5 4 4 4 5 5 5 3 4 5 5 5 3 4 5 5 5 3 4 5 5 5 3 5 5 5 5	32 75 39 00 46 25 54 50 39 00 79 00 54 25 34 75 43 00 41 00 42 00 41 00 42 00 40 00 41 00 33 75 51 25 40 00 36 75 39 00 36 75 39 00 36 75 39 00 41 00 42 00 42 00 43 47 45 00
61425 100903 103939 100906 117181	Hope	New Carlisle Chatham	13 12 11 10 16	Agapit Leclerc Jos. Gauvin F. T. B. Young. Chas Rail Philip Rive. Joseph Sayoy	Caraquet	5 3 5 4 5	49 25 33 75 47 25 39 00 52 25
103931 96724 103289 100958 100965 116509	Irene Isabel Jersey Lily John B Josephine Kasaga	. "	12 11 12 11 11 59	Wm. Fruing & Co J. Bte. Hebert Wm. Fruing & Co W. S. Loggie Co Philip Rive. F. T. B. Young.	Caraquet	4 5 4 4 0	41 00 47 25 41 00 40 00 40 00 59 00
112169 111466 103949 107774 103288 103283	Kathleen King Edward King Fisher Klondyke Kite Koh-i-noor	Chatham	15 14 13	Wm. Fruing & Co C. Robin Collas Co Wm. Fruing & Co C. Robin Collas Co P. E. Lanteigne Philip Rive	0	3 4 3 4 3	35 75 42 00 35 75 42 00 35 75 39 00 34 75
111461 100303 107973 122059 112152 100972	Ladysmith Lark L'Etoile Letty Jare Lillian Lizzie D	" " " " " " " " " " " " " " " " " " "	17 10 15 15 15 11	Hypolite Chiasson. Wm. Fruing & Co Prudent Gallien. Jno. M. Ward. C. Robin Collas Co F. T. B Young.	L. Lameque Caraquet  Miscou Caraquet	5 4 4 5 3	53 25 39 00 44 00 51 25 36 75 32 75

# List of Vessels which received Fishing Bounty, &c.—New Brunswick—Con.

# GLOUCESTER COUNTY—Continued.

Official Number.	Name of Vessel.	Port of	Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
								\$ ets
100902			m	10	Wm. Fruing & Co	Caraquet		31 75
116977 116480	Mabel			16 10	W. S. Loggie Co John Paulin	Chatham	3	45 00 31 75
100955	Majestic	11		10	W. S. Loggie Co.	Chatham	3	31 75
112158	Maple Leaf	11		13	Wm. Fruing & Co	Caraquet	4	42 00
116978	Margaret	11		16	W. S. Loggie Co	Chatham	5	52 25
112163 107779	Margaret Ann	11		13 15	John Jones	Shinnegan	5 4	49 25 44 00
72100	Marie			11	Eugene Gauvin	Lameque	3	32 75
103278	Marie Celia	11		13		Caraquet	1 7	42 00
117182	Marie Etoile		• • • • • • •	20	10 OS, A. Doiron	L. L'ameque	5	56 25
100292 100295	Marie Joseph Marie Louisa	11		12 18	Lazare Gauvin Jos. A. Paulin	Caraquet	5 4	48 25 47 00
116471	Marie Louise	11			Gustave Chiasson	11	4	39 00
111847	Mary	11		14	Gustave Chiasson David Albert	11	4	43 00
103084	Mary Emma			11	Wm. Fruing & Co	17	0	47 25 57 50
92413 116478	Mary Jane	11		14 11	P. C. Doiron	Mizonette	6 4	40 00
100957	Mary R	11		12	TWO DO LINES TO CO	O112011201112,	5	48 25
116475	Mary Rose	n		17	Wm. Cormier	Caraquet	5	53 25
112161	Mary Star	19		15	H. Le Bouthillier	"	4	44 00 58 50
112150 111844	MaryStarof the Sea MaryStarof the Sea			15 14	Luke Friolet	"	6 3	35 75
116477	MaryStarof the Sea			20	Ferd. Savoy	Shippegan	4	49 (0
103768	Mayflower	11		13	C. Robin Collas Co Ferd. Savoy. C. Robin Collas Co	Caraquet	3	34 75
107777	May Flower	11		11	Gelas Lauteigne	Island River	0	47 25
100779 $112164$	Mermaid Merry Christmas	11		11 13	W. S. Loggie Co Celestin Jean	L. Lameque	5	$\begin{array}{cccc} 40 & 00 \\ 49 & 25 \end{array}$
100300	Mikado			13	C. Robin Collas Co	Caraquet	4	42 00
88669	Morning Star	11		12	Gustave Gionet	Pokemouche	1	19 25
117188	Morning Star	***	• • • • • • •	14	Romain Noel	Lameque	5	50 25 50 25
$\frac{122055}{122052}$	OliveOpal.			14	A. Duguay P. Chiasson	Island River	5 5	46 25
103004	Oriole			11	Wm. Fruing & Co	Caraquet	3	32 75
103005	Osprey	11		10	Wm. Fruing & Co Thos. J. Maillet	Shippegan	4	39 00
100904	P.T.S			11	H. Lanteigne A. F. Aché	Caraquet	4	$\frac{40\ 00}{43\ 00}$
100297 100776	Palma			14	Philip Rive	Caraquet	3	32 75
103778	Pelican			13	Wm. Fruing & Co	"	4	42 00
103764	Petrel	11		12	Wm. Fruing & Co  Peter J. Fiott M. Lanteigne T. H. Le Bouthillier Wm. Fruing & Co Philip Rive W S. Loggie Co.			33 75
122623	Pride of the Fleet.				M Tentaigne	11	5 5	60 25 $54 25$
116974 96740	Providence			13	T. H. Le Bouthillier	11	5	49 25
96732	Providence	11		11	Wm. Fruing & Co		4	40 00
100775	Redgauntlet	11		11	Philip Rive	CI	3	32 75
103586	Remus	11		17 10	C. Robin Collas Co		4 4	46 00 39 00
100952 103078	Replevin Reward			13	Jas. De Grace	Shippegan	4	42 00
97191	Rita	11		12	Jas. De Grace C. Robin Collas Co	Caraquet	5	48 25
111470	River Branch	11			Wm. Fruing & Co	11	2	25 50
103946	Robin			12	C. Robin Collas Co W. S. Loggie Co	11	5 5	48 25 55 25
103587 92404	Romulus	11		19	F. O. Aché.	Lameque		53 25
100908	Rosalie			10	Philip Rive	Caraquet	3	31 75
100773	Rupert.	11			A - A - Z - Z	T		41 00
116972	St. André	11		15	André A. Aché O. Chiasson	Lameque	5	$\frac{44}{50} \frac{00}{25}$
116473 117187	Ste. Anne			13	Jean B Noel		5	49 25
117189	Ste. Cecelia			13	Gelas Aché	L. Lameque	5	49 25
111469	St. John	11		13	John Aché	11	4	42 00 39 00
112167	St. Joseph	1 11		10	Raphael Gionet	caraquet	4	39 00

# List of Vessels which received Fishing Bounty, &c.—New Brunswick—Con.

CLOHOESTER	COUNTY-Concluded.
GLUUUUBSIEM	COUNTI-Continuen.

		GLOUCESII	210	OCNTT Concounter.			
Official Number.	Name of Vessel.	Port of Registry	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
122051 107776 74401 100907 103010 117190 103584 100959	St. Joseph Ste. Julie. St. Peter Sara. Sarah Sarah B. Saturn Saxon. Sea Bird. Sea Flower. Sea Flower. Sea Star Silver Moon Sir Charles. Spark Stanley. Surprise Swallow Swallow Swallow Swallow Swift Teutonic. Three Brothers. Tickler. Three Brothers. Tickler. Two Brothers. United Empire. Valkyrie Victoria Vylakyrie Victoria Voltaire Von Moltke Vulture. White Fish. White Fish. White Fish. Worlds Fair Wren. Zephyr		11 13 14 11 10 10 10 19 14 10 13 14 11 11 11 12 15 16 14 10 11 11 11 11 11 12 13 14 14 16 16 17 18 18 18 18 18 18 18 18 18 18	Adolphe Aché M. J. Noel Adolphe Aché. Wm. Doucet F. T. B. Young. A. S. Lanteigne D. Blanchard. Philip Rive W. S. Loggie Co. F. T. B. Young. C. Robin Collas Co. Jos. Savoy W. S. Loggie Co. F. T. B. Young. Wm. Fruing & Co. A. D. Gionet. Aimé Chiasson C. Robin Collas Co. Wm. Fruing & Co. C. Robin Collas Co. Wm. Fruing & Co. Wm. Fruing & Co. C. Robin Collas Co. Wm. S. Loggie & Co. Jno. S. Albert D. Chiasson C. Robin Collas Co. W. S. Loggie Co. Jacques Noel. P. M. Lanteigne Peter J. Frigot W. S. Loggie Co. Eutrope Chiasson. F. T. B. Young. Wm. Fruing & Co. C. Robin Collas Co.	Caraquet  Chatham Caraquet  Shippegau Chatham Caraquet  Island River Caraquet  """  """  """  """  """  """  """	4534444333455454545452334444445534433	\$ cts.  48 25 41 00 41 00 47 25 31 75 39 00 39 00 39 00 39 75 42 00 50 25 32 75 42 00 50 25 32 75 42 00 50 25 32 75 42 00 50 25 32 75 42 00 50 25 32 75 42 00 50 25 32 75 48 00 50 25 48 00 50 25 48 00 50 25 48 00 50 25 48 00 50 25 48 00 50 25 48 00 50 25 48 00 50 25 48 00 50 25 48 00 50 25 48 00 50 25 48 00 50 25 48 00 50 25 48 00 50 25 48 00 50 25 51 50 31 75 51 50 33 75 41 00 42 00 43 00 39 00 40 00 42 00 49 25 31 75 40 00 32 75 41 00
		K.	ENT	COUNTY.			
122629 122624	Cluster Rustic	Chatham	. 10	Geo. Gallant John Fraser		3 2	31 75 24 50
		NORTHU	MBE	CRLAND COUNTY.			
122499 96725 122622 100969 92420 122495	Beat the Wind Bessie T. Gander John Bull. Mary Louise Victory.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	. 10 10 10 . 13 . 10	Luke Mallay Donald Loggie Patk. Sullivan	Burnt Church Bay du Vin Neguac Burnt Church	. 5 . 2 . 2 . 2	24 50 46 25 24 50 24 50 27 50 24 50
		ST.	JOI	IN COUNTY.			
100320	Lena	Barrington	. 13	Wm. J. Wilson	Lorneville	. 3	34 75

# List of Vessels which received Fishing Bounty, &c.—Concluded.

# PROVINCE OF PRINCE EDWARD ISLAND. KINGS COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner. or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
116278 75904 122086	Alaska Alena L. Young. Alice. Carrie O Charlotte Christie Belle. Empress Florence Francis D. Cook Frank Hustler Janet JohnG.Scrimgeour Muriel O.L.B. Outlook Olive S Pearl. Ryse Silver Spray Stella R. Success	Charlottetown Canso Charlottetown " Charlottetown " Charlottetown " " Shelburne Pt. Hawkesbury. Charlottetown Lunephyrg	35 10 12 14 13 26 14	Lot Graham.  Reuben Cohoon.  Jos. M. Cheverie Lauchlin McNeill.  Peter Dalton.  Herbert Williams.  Sillas Sencabaugh.  Wm. Gillam.  Hugh Jackson Sr.  Alex Jackson.  Jno. A. McKenzie.  Thos. Poole.	Georgetown. Beach Point. Souris Murray Hbr Beach Point. Beach Point. Georgetown Beach Point. Georgetown Beach Point. Souris Souris Beach Point. Point Pleasant. Beach Point. Bouris Montague	6 5 3 2 4 5 3 5 4 5 4 5 5 5 5 4 4 4 4 3	\$ cts. 31 75 78 50 31 75 78 50 31 75 28 50 42 00 47 75 35 75 39 06 49 25 43 00 35 75 51 25 55 00 43 00 37 75 34 75
		PRI	NCI	E COUNTY.	·	·	AND DESCRIPTION OF THE PARTY OF
103507 107758 111850 94670 103592 94992 107760	Annie Daisy Johnny M Katie A. Burns Rosamond Sarah P. Ayer Western Prince	Charlottetown Chatham Charlottetown	16 13 12 36 18 64 10	Daniel Fraser. Jno. T Murphy. John Agnew. D. O. Champion. John Champion.	Alberton Ebbsfleet Alberton Baltic Alberton	6 3 6	37 75 56 50 33 75 79 50 54 25 143 75 24 50
		QUI	EEN	S COUNTY.			
107763 100580 103532 100474 92745	Guinea. Maggie E. C. Maria A R. Beatrice Surprise.	Charlottetown	10 20 22 19 18	Boyce Harding. J. H. McLeod. Nectaire Peters. Jonathan Delaney. Frank Pidgeon.	French River North Rustico French River	3 6 3 5	31 75 41 75 65 50 40 75 54 25
				OF QUEBEC.			
103318 88464 85400 85399 111430	Little Heir	Arichat	19 10 13 10 23	Montague Arseneau Nectaire Boudreau Honoré Cormier Wm. Boudreau Alfred Vigneau (V)	Amherst	4 5 5 4 4	48 00 46 25 49 25 39 00 52 00
		SAGU	EN.	AY COUNTY.			
100365	Marie Louise	Quebec	12	Wm. Ferguson	Seven Islds	3	33 75
22	$3\frac{1}{2}$			)			

# APPENDIX No. 3.

# NOVA SCOTIA.

District No. 1.—Comprising the four counties of the Island of Cape Breton Acting Inspector C. D. Bertram, North Sydney.

District No. 2.—Comprising the counties of Cumberland, Colchester, Pictou, Antigonish, Guysborough, Halifax and Hants.

Inspector R. Hockin, Pictou.

District No. 3.—Comprising the counties of Kings, Annapolis, Digby, Yarmouth, Shelburne, Queens and Lunenburg.

Inspector A. C. Robertson, Barrington Passage.

# ANNUAL REPORT OF THE FISHERIES OF DISTRICT No. 2.

The Superintendent of Fisheries.

SIR,—I have the honour to submit my annual report of the fisheries of District No. 2, Nova Scotia, together with tabulated returns of statistics, also schedules showing the increase or decrease of the catch of each kind of fish, for the year 1908.

The estimated value of all the fish taken in the district is \$2,026,440, and compared with the estimated values of the catch of last year, \$1,820,305, shows an increase of about 13 per cent.

Of the deep sea fishes there was a decrease in the catch of codfish of about six per cent, a decrease in haddock of about twenty per cent, of pollock of about fifty per cent, an increase of the catch of hake of about twelve per cent, an increase in the catch of herring of about thirty per cent, and of mackerel of about one hundred per cent.

#### SALMON.

There is a decrease in the catch of salmon, compared with last year of about twelve per cent, but it is equal to the average catch of the past twenty years.

On the Northumberland Straits there was a decrease of about sixteen per cent, attributable to a heavy storm which destroyed a large percentage of the gear during the fishing season.

On the Atlantic coast, there was a decrease of about twelve per cent, and on the

Bay of Fundy an increase of about two per cent.

As the success of this fishery depends largely whether the conditions are favourable for the spawning fish when they are ascending the rivers in the autumn months, it being regarded as favourable if the rivers are full of water at that time, thus affording free access to spawning resorts, and when the rivers are low, the fish unable to ascend and exposed to the depredations of poachers, as unfavourable. I give below a record of the condition of the rivers in this district since 1896.

1896	Conditions very favourable
1898	" unfavourable
1901	
1903	
1904	66
1905	" very unfavourable
1906	" favourable
1907	66
1908	" very unfavourable

#### -SHAD.

From time to time I have remarked upon the decline of this fishery, which should yield an average catch of 1,200 barrels.

The returns for this year show the lowest catch on record being only 153 barrels.

#### ALEWIVES OR GASPEREAUX.

There is a steady decline in this fishery this year of about thirty per cent, the catch having been 1,434 barrels, from 1889 to 1896 the catch average about 4,000 barrels, from 1896 to 1903 about 3,000. Since that year the returns show a practically diminishing catch.

#### MACKEREL.

The reported catch is the largest for ten years, these fish were taken in large quantities in Guysborough county more than could be cared for properly.

#### LOBSTERS.

There has been an increase in the catch of the district of about eight per cent. On the Atlantic coast in the counties of Guysborough and Halifax the increase was about four per cent, and on the Straits of Northumberland in the counties of Cumberland, Colchester, Pictou and Antigonish the increase was about twelve per cent.

The season regulation for lobsters was well obeyed during the past year, the fisher-

men realizing that it is in their interest to maintain it.

#### SQUID.

A large quantity of this fish stranded on the shores of Cumberland county, a very unusual occurrence. These were not included under the schedule heading, as they were used by farmers for manure.

#### FISHWAYS.

One of the most uncertain fish to provide fish passes for, is the gaspereaux. They ascend some, but although on others the known conditions are the same, they have refused to do so. A fishway built at Fisher's Mills, Guysborough county, last year, has proven acceptable to them and they are seen to pass throughit in large numbers. The height of the dam is ten feet.

A fishway is required in the lower dam at Ship Harbour, on two dams on the Laurencetown river, in Halifax county, one on the Meander river, in Hants county,

one on Salmon river, Colchester, and one on the River John, Pictou.

I am sir, your obedient servant,

R. HOCKIN,

Inspector of Fisheries.

# NOVA SCOTIA

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity in the County of Richmond, province

		1	Fishin	VESS	ELS A	AND :	Boats	•							F	ISHI	ng G	ÉAR
			Ve	essels.		Ι	Boats.		G	il <b>N</b> et	s.	5	Seine	s.	Tra	ap ets.	Tra	wls.
Number.	Districts.	Number.	Tonnage.	Value.	Total, fisher- men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.
	Richmond County.			\$			\$				\$			\$		\$		\$
	Point Tupper to Port Richmond. River Inhabitants		112	2000	19	60	600	68	1200	24000	4800						10	50
_	and vicinity River Bourgeois &	1	25	<b>6</b> 00	3	81	935	97	950	19000	3800						19	95
4	St. Peters West Bay		423	12340	108	43 30	480 360	51 36	430 120	8600 2400	1720 480						10 10	
	Arichat and Petit de Grat C. Auguet to Port		276 · 26	4075	79	122	1240	175	700	14000	4800						185	1050
	Royal including Janvrin Island	3	59.36	610	10	164	1596	214	908	18000	5200	1	30	100			149	1015
	Rocky Bay and vicinity	1	38.11	750	11	79	800	122	1230	18600	10900						60	300
	Descousse to Martinique  Irish and Hay	4	120.03	2300	27	22	186	45	178	2560	1800						40	200
	Coves, Lynch River, Barra Hd and Red Islands.					44	480	49	55	1195	335						33	360
	Grande Grève and St. Peters Island Rockdale	1	22	350	5	26 40	575 1000	70 130	140 420	2800 4400	800 2100						15 26	
12	L'Ardoise Lower and West	4	90	2500	23	329	17300	640	3700	43400	18600				1	900	53	560
	Point Michaud & Grand River					53	1160	120	290	5800	1830						35	330
	L'Archeveque and St. Esprit					24	635	75	135	2600	580						20	90
	Caplin Cove and Framboise					29	650	74	85	1760	450						27 26	130 160
16	Fourchu					42	3500		200	4000	2100			4.00	-			
	Totals	50	1165	25525	285	1188	31497	2299	9741	173055	60295	1	30	100	1	900	718	4810

# DISTRICT No. 1.

and Value of all Fishing Materials and other Fixtures used in the Fishing Industry of Nova Scotia, for the year 1908.

R	MA'	FER	IALS.				Lobsi	ER PL	ANT.		0	THER F	'IXTUI	RES US	ED IN	Fish	ERIES	3.	FISH-	
Ve	eirs.		nelt ets.	Han Line			an- ries.	Traj	ps.	yed in	an	eezers d Ice buses.		sh	aı	ers nd arfs.	Tu Stear & Sn		WHOLE FISH ING GEAR.	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons Employed in Canneries.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Alexander
	\$		\$		\$		\$		\$			\$		\$		\$		\$	\$	-
		1	30	100	100			1200	600				65	650	10	1000	,		9830	1
		32	450	125	125			550	275				80	800	5	400			7480	
		11	55	474 70	474 70	1	300	1720	860	18	1	2000	87 32	3290 256	8	2500	3	500	24559 1196	
				204	950	2	2800	9400	9400	195	1	500	181	3500	35	450	4	350	29115	
		11	90	173	865	2	900	10800	10800	173	1	500	103	1230	38	770	4	535	24211	
				75	375	1	500	8500	8500	102	١		33	330	17	185	1	100	22740	)
		14	150	44	220			1800	1700	28	ļ		18	195	18	210			6961	L
				130	70	 							25	385					1630	)
		  -  -		190 300	90 150		3000	1600 1400	850 750		)		13 25	230 300	$\frac{2}{2}$	650 500			3770 8378	
				2000	750	)		335	140	)			160	10300	5	2000	)		53050	)
				520	290	2	2000	600	300	27			35	435	1	50	1	200	6593	5
				330	210		1000	510	255	5			19	<b>27</b> 0	1	50		200	3290	)
				175 400			1500	800 1500	400 750				9 30	120 1300		1300	9	200	1864 10950	
		$- \frac{1}{69}$	775	5310	1993	3 11	12000	40715	35580	77	5 3	3000	915	23591	170	10065	20	2485	215616	j

9-10 EDWARD VII., A. 1910

Return showing the kinds and quantities of Fish and Fish Products in the

						Kinds	of Fi	SH.					
Districts.	Salmon, fresh, lb.	Salmon, preserved in cans, lb.	Herring, salted, brls.	Herring, fresh, lb.	Mackerel, fresh, lb.	Mackerel, salted, brls	Lobsters, preserved in cans, lb.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, Tongues and Sounds, brls.	Haddock, fresh, lb.	drie	Haddock, smoked Finnan, Haddies, Ibs.
Richmond County.													
Point Tupper to Point Richmond			500			750			80			20	
2 River Inhabitants and vicinity			350		6000	650			380			65	
3 River Bourgeois and St. Peters			85 200		5800	230	16368		3475 125			205	
4 West Bay 5 Arichat and Petit de Grat	1850			10000	12000	2078	31200	15	1080	17	278000	1448	242000
6 C. Auguet to Pt. Royal including Janvrin Is. 7 Rocky Bay & vicinity	300	1	2273 185	13000 9000	22500 3300	1449 1131	16776 14256	263 11	1191 719	18 6	18400 <b>0</b> 7100	1445 189	
8 Descousse to Marti- nique			243	2500	2800	381		7	1536	6	2800	184	
Lynch River, Barra Hd. and Red Island.			245	11200					700	11			
O Grand Grève and St. Peters Islands 1 Rockdale			250 600	3400 1400	78000 10000	120 3000	22080		390 1000	3 4	19000 10000	50 1700	
2 L'Ardoise Lower and West	1800		16000	1300	16000	13000	{   • • • •	} [	5800	23	3000	3800	
Point Michaud and Grand River	2000	300	70	5000		950	25000		380	4	300	175	
L'Archeveque and St. Esprit			50			675			240	3	400	170	
boise			45 25	4000	175 400	100 375	39200	100 100	350 750	3 4	80 300	75 250	
Totals	5950	300	22815	60800	156975	24889	164880	496	18196	102	504980	9776	242000
Rate	.15	•15	\$4½	.1	•12	\$15	.30	\$5	\$41/2	\$10	.3	\$3	
Values	892	45	102667	608	18837	373335	49464	2480	81882	1020	15149	29328	14520

SESSIONAL PAPER No. 22

County of Richmond, province of Nova Scotia, for the year 1909.

						Kin	DS O	F Fis	н.								OF	
Hake, dried, cwt.	Hake, sounds, lb.	Pollock, cwt.	Halibut, lb.	Trout, lb.	Shad, brls.	Smelts, lb.	Alewives or Gaspereau, brls.	Eels, brls,	Clams, bris.	Flounders, 1b.	Tom Cod or Frost Fish, 1b.	Squid, brls.	Coarse and Mixed Fish, brls.	Fish Oil, galls.	Fish as Bait, brls.	Fish as Manure.	TOTAL VALUE ALL FISH.	NUMBER.
																		Semination of the least
						500				15000		150	15	32	40		15,090	1
	60	30				18000		22		4500	, .		20	252	55		15,328	2
		125	6000			2000		6		10000 2000			60	1390 50	115 15	25	27,815 1,572	3 4
10	5	474	1600			800	1	40	200	34000	900	619	104	264	1500	1500	91,538	5
143 25	116 38	129 37	600 2000	70		7800 1050		590 153	4830 170	89400 61900	1340 86	3834 172	210 119	259 85	2280 860	1440 151	96,060 33,174	6 7
20		146	50			2700		421	250	8000		459	175	143	650	144	23,589	8
33	17	87	800	1400		3100	30	37		11200	7000		29	450	20		6,442	9
8 13	11 8	230 600	60 1000	650 150	10	1000 800	53 110	29 10	11 9	9000	3000 3000	21 30	78 40	160 200	11 30		16,940 68,569	10 11
27	15	1600	5500				350	18	28	7000	7000	95	350	4800	165		317,311	12
27	15	170		1400			48	22	28	7000	10200	20	41	350	33		27,079	13
18	9	110	1600	650			32	21	25	5000	5000	28	42	300	25		13,605	14
11 5	5 3	115 150	1000 4000	310 200			34 30	23 13				40 50		380 500			5,423 24,256	15 16
320	302	4003	27210		10	37750	688	1405	5576	274959	44726	5518	1405	9615	5865	3260		
\$3	25	\$3	.10	10	\$10	4	\$4	\$10	\$2	.3								
960	75	12009	2721	513	100	1510	2752	14050	11152	8248	1281	22072	2810	2884	8797	1630	783,791	L

9-10 EDWARD VII., A. 1910

Return showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c.,

		I	Fishi	NG VE	SSELS	s ANI	Волт	s.		-						Fish	ING (	GEAR
	Districts.		Ve	ssels.			Boats.		(	Hill Net	ts.	8	Seine	s.		rap ets.	Tra	wls.
Number.		Number.	Tonnage.	Value.	Total Fishermen.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.
	Cape Breton Co.			\$			\$				\$			\$		\$		\$
2 3 4 5	Gabarus and vicinity.  Mira Bay. Louisburg Big Lorraine and vicinity. L. Lorraine to Mira River including Main-à-Dieu Scatarie Morien Bay and		42  90 10 28	1500 2875 280 600	30 4	35 15 58 26 69 11 50	3050 150 1400 780 1779 180 600	95 15 114 38 173 36 60	25	7320 200 5500 3750 14500 750	2850 100 2220 1500 4595 240						30 48 10 30	200 150 460 100 180
	North Sydney and vicinity		79 63	2900 7200			826 2210		695 580		6950 5800		75				430 525	5160 6300
	Little Bras d'Or, Little and Big Ponds, &c East Bay, both	1	,	<b>2</b> 50			956		,		400						81	253
12	sides, and vici- nity Upper North Syd- ney, Long Island,					107	1383	173	163	3225	1061	20	400	100			96	377
	Leitches Creek,	6	90	2190	18	32	435	53	174	3480	870		;				23	110
		27	406	17798	127	550	13749	995	2937	78875	27586	21	475	220			1313	13290

SESSIONAL PAPER No. 22

in the County of Cape Breton, Province of Nova Scotia, for the Year 1908.

OR	Mas	rer	IALS.				Lob	STER P	LANT.		(	)THER	Fixt	URES U	SED I	n Fis	HER	RIES.	WHOLE FISHING GEAR.	
w	iers.		nelt ets.	Han Line			inne-	Tra	ps.	employed in ries.	an	eezers d Ice ouses.	and	roke Fish uses.	21.		Ste	lugs, eamers Sm'cks	WHOLE	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons eml Canneries.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Number.
	\$		\$		\$		\$		\$			\$		\$		\$		\$	\$	
				180 560	117 280	3	6000	6000	3000	67		500	30	4000	15 18	750 3000	2	5000 700	21267 250 18800	3
		4		300	305	1 2	3000	1400 5400	1050 2700	62	3	90	18 64	1800	15 41	2500 411	2	650	9430 17403	
		4		75 120	38		1900	8550	4125				25	40	2	20			9965	6
				550	280	1	1500	2200	4400							2260			32011	
				325	260	1	2500	6000	12000	34	2	6000	29	1230	6	1540	5	2600	47760	9
		7	56	115	68				. ,		1	800	26	340	16	260	1.	200	3583	3 10
				173	<b>6</b> 5			136	45				23	259					3290	11
		20	80	48	24														3709	12
, .		31	144	2687	1647	12	18400	31686	28820	272	17	16190	248	9284	120	1074	1 23	10500	168366	3

9-10 EDWARD VII., A. 1910

Return showing the kinds and quantities of Fish and Fish Products in the

							Kinds	or F	sh.					
Number.	DISTRICTS.	Salmon, fresh, lb.	Herring, salted, brls.	Herring, fresh, lb.	Herring, smoked, lb.	Mackerel, fresh, lb.	Mackerel, salted, bris.	Lobsters, preserved in cans, lb.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, bris.	Haddock, fresh, lb.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, lb.
	Cape Breton Co.													
2 3 4 5 6 7 8 9	Gabarus and vicinity Mira Bay Louisburg Big Lorraine and vicinity L. Lorraine to Mira River including Main-à-Dieu Scatarie Morien Bay and vicinity North Sydney and vicinity Glace Bay, Lingan and Sydney Harbour Little Bras d'Or, Little and Big Ponds, &c	3600 8990 1138 3000	550 240 55 599 95 700 4880 1710	9000 3000 1102 350 172000 30000	2000		508 243 158 21 50	10560 45000  77280 10184	950  160  100	1750 1860 768 3070 750 500 1375 3665	10	23000 16000  36200 22600	1544 125 100 300 530	
	East Bay, both sides, and vicinity Upper North Sydney, Long Island,		696	8900			••••		75	1163				
	Leitches Creek,		1407					: • • • •		5360				
	Total quantities.	20428	10985	231352	2000	42155	2174	271280	2175	21351	10	100300	4052	2000
	Rate\$	.15	41/2	·1	.2	·12	15	.30	5	$4\frac{1}{2}$	10	.3	3	. 6
	Values \$	3064	49432	2313	40	5058	32610	81384	10875	96079	100	3009	12156	120

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# County of Cape Breton, Province of Nova Scotia, for the year 1908.

L.						Kı	NDS (	of F	ISH.								
Hake, dried, cwt.	Pollock, cwt.	Halibut, lb.	Trout, 1b.	Shad, brls.	Smelts, lb.	, brls.	Eels, brls.	Oysters, brls.	Flounders, 1b.	Tom cod or frost fish, 1b.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, gall.	Fish as bait, brls.	Fish as manure, brls.	TOTAL VALUE OF ALL FISH.	Number.
			, ,													\$	
50	130	2000		35		140							750	30		50,661 1,360 39,875	1 2 3
											90		1400	140		14,788	4
22	1300 100	3100 7000	,	4 3	650	29 10					18 3		1595 350	60 23		44,468 6,134	5 6
		8000					10					60			400	30,626	7
	301	29900					10				20	,	215	1120	,	42,720	8
• • • •	180	19700	,								53		250	740		42,202	9
18	100	12100			2100		23		1500	900	20		645	330		9,513	3 10
••••			4000		7800	65	164	56		5900		80	89	190		12,436	3 11
		13200			4500		10									32,05	12
90	2257	95500					217	56	1500	6800	424	140	7394	2963	430		
				10	•4	4	10	6	.3	.3	4	2	.30	11/2	.50		
270	6771	9550	400	420	602	976	2170	336	45	204	1696	280	2218	4444	215	326,83	7

9-10 EDWARD VII., A. 1910

RETURN showing the Number, Tonnage and Value of Vessels and Boats, &c.,

		FISHING VESSELS AND BOATS.							• FISHING GEAR									
	Districts.	Vessels.				Boats.			Gill Nets.			Seines.			Trap Nets.		Trawls.	
Number.		Number.	Tonnage.	Value.	Total Fishermen.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.
	Victoria County.			\$			\$				\$			\$		\$		\$
	Little Narrows (both sides) Baddeck districts and vicinity Werck Cove to Smoky Head Briton Cove to Ba- rachois					35	422	48	72	1560	420					• • • • •	29	59
-						51	582	30	84	1887	774				2	400	28	73
						39	790	71	108	3450	1330				3	2800	27	280
-1						48	960	84	106	3240	1150						35	390
	North and South Bays & vicinity		182	3600	36	197	3525	384	515	11451	3580			[ • • •	7	3800	201	1407
}	Neils Harbour and New Haven					76	21320	107	85	1720	860				4	2500	30	570
8	Bay St. Lawrence and vicinity White Point					52 40	720 800	104 60	63 45	2050 800					1 2	1000 2000		
	Sparling's B'k and Sugar Loaf					18	270	40	24	720	240							
10	Dingwall & Cape North					17	465	34	23	850	450				1	1000.		
		9	182	3600	36	573	29854	962	1126	27728	10984				20	13500	372	2925

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in the County of Victoria, Province of Nova Scotia, for the Year 1908.

OR	Ma	rer	IALS.				Lobs	TER P	LANT.	-	C	THER I	Fixt	URES U	SED I	n Fisi	HER	cies.	HOLE FISHING GEAR.	
Wi	iers.		nelt ets.	Han			anne-	Tra		employed in ries.	an	d Ice ouses.	Fi	e and	Pier Wh	C -	Ste	lugs, eamers Smac's	WHOLE	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.			Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Number.
	\$		\$		*		\$		\$			\$		\$		\$		\$	\$	
				60	27								3	35					963	1
		3	46	92	47			24	22				. 1	10	2	10			1964	2
			,	83	52	2	750	1450	1450	24			21	1250			c =		8702	3
				100	68	2	800	3000	3000	36	1	100	36	2270	1	5000	2	550	14288	4
	] [ ,	3	12	778	778						4	2900	24	5000	20	3475			28077	5
				305	295	3	800	3150	3150	44	1	900	37	1850	3	1700	3	700	34645	6
				206 120	309 180		1000 500	3000 2000	3000 2000	17 8			1 3	500 1000	2	700	1 1	400	8475 8020	
				80	120														630	9
				68	102	1	500	1600	1600	9			8	1500	8	800	1	500	6917	10
			58	1892	1978	10	4350	14224	14222	138	6	3900	134	13415	36	11688	8	2210	112681	

9-10 EDWARD VII., A. 1910

RETURN showing the Kinds and Quantities of Fish and Fish Products in the

			,		1	Kinds	of Fis	н.					
Districts	Salmon, fresh, lb.	Salmon, salted or smoked, lb.	Herring, salted, brls.	Herring, fresh, lb.	Mackerel, fresh, lb.	Mackerel, salted, lb.	Lobsters, preserved in cans, lb.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lb.		Haddock, smoked, finnan haddies, brls.
Victoria County.													
1 Little Narrows, (bosides)			153	9000					400				
2 Baddeck districts a vicinity	2140		28	28300	700	2		23	36		200	2	
3 Wreck Cove to Smo Head	600		214			19	17808		89		680		
4 Briton Cove to Ba			108			13	30624		138		46		
5 North and South Ba and vicinity	ys 2400	3200	425		600	41			4120		4500	6158	26000
6 Neils Harbour a New Haven	nd		15		3600		45024		3331	4		1220	
7 Bay St. Lawrence a vicinity 8 White Point	nd 5300 3500		282 210			3		,	403 595			105 100	
9 Sparling's B'k a Sugar Loaf			67			5			50			8	
10 Dingwall and Ca	pe 3000		90			2			190			200	
Total quantitie	ŝ 19090	3200	1592	37300	4900	89	93456	23	9352	4	5426	7793	26000
Rate	\$ 15	20	$\frac{-4\frac{1}{2}}{4\frac{1}{2}}$	·1	12	15	.30	5	41/2	10	-3	. 3	. 6
Values	.\$ 2863	640	7164	373	588	1335	28036	115	42084	•40	162	23379	1560

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### County of Victoria, Province of Nova Scotia, for the Year 1908.

					Kn	NDS OF	Fish.							
Pollock, cwt.	Halibut, lb.	Trout, lb.	Smelts, lb.	Alewives or Gaspereau, brls.	Eels, brls.	Oysters, brls.	Flounders, 1b.	Tom Cod or Frost Fish, lb.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	TOTAL VALUE OF ALL FISH.	Number.
				*									. \$	
		1900	. 2200		110	152	4700	4600			130	38	5,243	1
6	150	595	1000	12	16	18			P		55	15	1,620	2
500									6	31	420	42	8,871	. 3
29										13	112	10	10,922	4
1080					4				287		7720		49,065	5
80	900								106		1650	340	34,510	6
10 50	2200 1800								35 180		490 500		4,774 5,707	
	1200											50	820	9
• • • • •	3700								30		80		2,854	10
1755	9950	2495	3200	12	130	170	4700	4600	644	44	11157	495		
3	•10	•10	.4	4	10	6	.3	.3	4	2	•30	11/2		
5265	995	249	128	48	1300	1020	141	138	2576	88	3347	742	124386	5

9-10 EDWARD VII., A. 1910

RETURN showing the Number, Tonnage and Value of Vessels, Boats, &c.,

		]	Fishi	ng Ve	SSEIS	ANI	Воат	s.								Fish	ing (	EAR
	Districts.		Ve	ssels.		]	Boats.		G	ill <b>N</b> et	s.	S	eine	s.		rap	Trav	wls.
Number.		Number.	Tonnage.	Value.	Total Fish- ermen.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.
	Inverness County.	}		\$		J	\$	. [	1	}	\$			18		\$		\$
3	Meat Cove, Pollet's Cove and Pleasant Bay Cape Rouge, Eastern Harbour and Cheticamp Margaree Harbour and Belle Côte. Doucette's Delaney's and Whale Coves		249		87	36 63 31	360 2250 1350	78 128 71 42	63 171 64 49	2555 4670 2800 4200	1450 2460 1700 3700				0 0	500	3 16 19 14	15 112 430 550
	Chimney Cor. and St. Rose					9	500	20	24	1800	1825						2	70
6	Broad Cove, Seal Isl'd and vicinity					53	1450	146	54	1900	760						10	335
Ť	Inverness and vi-		, . , .			7	135	14	14	318	135			[			3	2
	Port Band and Sight Point	(				9	250	25	32	704	270						20	115
6	Mabou Lake Ainslic and vicinity.					30	441	66	67	1472	850						29	210
10	Port Hood and Vi-					90	2030	117	365	10950	3650		l		1	500	405	1650
11	Judique, Creignish and vicinity	1	15	.250	5	110	1300	147	165	4950	1650	Ì.,		J. 1			160	640
12	Pts. Hastings and Hawkesbury	1	10	200	3	34	840	78	70	2100	700						25	100
18	West Bay, River Denys and Mala-					125			406		822						58	154
	gawatch				-									-		1000		

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in the County of Inverness, Province of Nova Scotia, for the Year 1908.

OR	Mar	reri	ALS.				Log	STER I	PLANT.		(	OTHER	Fixt	ures T	Jsei	IN F	івні	ERIES.	WHOLE FISHING GEAR.	
w	iers.		nelt ets.	Ha Lin	nd nes.	С	anne- ries.	Tra	ps.	loyed in	aı	reezers ad Ice louse.	$\mathbf{F}$	ke and ish ouse.		Piers and harfs.	Ste	Tugs, eamers macks.	WHOLE	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons Employed Canneries.	Number.	Value,	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Number.
	\$		\$		\$		\$	-	<b>\$</b>			\$		\$		\$			\$	
				145	175	3	3300	12000	2850	40	6	160	13	140	1	7000	2	1000	17250	1
• •				430	525	5	3200	9450	5860	93	4	3000	23	4050	17	14800			41757	2
				300	<b>24</b> 0	2	<b>2</b> 50	2800	830	16	5	2500	20	1150	14	22000	1	200	30050	3
			• • •	190	415	1	200	1000	400	15	1	200	13	1200	3	650			8615	4
				47	40				4, 5 4				5	300	1	180			2915	5
30	600			230	478								23	875	2	5500			9998	6
٠.				40	40			1300	640		2	800	3	180					1951	7
				85	70			800	480										1185	8
				115	111	1	800	1500	1000	30	2	500	6	300	2	750	1	400	<b>5</b> 36 <b>2</b>	9
		10	40	310	310	2	3000	7900	4740	39	1	800	40	850	5	10000	4	250	27820	10
		12	50	180	180	3	1800	10700	6420	69			41	830	3	19000	6	300	32420	11
	,	85	340	60	60			500	300				3	60040	2	4000			66580	12
				312	81								19	223	19	204		••,•••	2984	13
30	600	107	430	2444	2725	17	12550	47959	23520	302	21	7960	209	70138	69	84084	14	2150	249487	

9-10 EDWARD VII., A. 1910

RETURN showing the kinds and quantities of Fish and Fish Products in the

			١.		K	INDS O	f Fish						
Districts.	resh, lb.	Salmon, preserved in cans, 1b.	Herring, salted, brls.	Herring, fresh, brls.	Mackerel, fresh, brls.	Mackerel, salted, brls.	preserv lb.	Lobsters, fresh in shell, cwt.		Cod, tongues, and sounds, cwt.	Haddock, fresh, lb.	dried, c	Haddock, smoked finnan haddies, lb.
Inverness County.	1	1		[	.	·	The state of the s	}		]	}	}	
1 Meat Cove, Pollet's Cove and Pleasant Bay	9850	300	10	12850	800	76	33360		<b>3</b> 39		11600	10	
2 Cape Rouge, Eastern Hr. and Cheticamp.	16920	2400	546			288	61968		3049	16	77500	50	
3 Margaree Harbour and Belle Côte	14800		97			83	13576	338	2154	4		120	
4 Doucette's Delaney's and Whale Coves	32200		56			67	16960	169	235			148	
5 Chimney Corner and St. Rose.	28164		35			30			130			16	
6 Broad Cove, Seal Isld. and vicinity 7 Inverness and vicinity 8 Port Band and Sight	3500		140 235	• • • •		90 45	2900		375 300			40 130	
Point			290			35	4200		375			75	
9 Mabou, Lake Ainslic and vicinity			14 780	5000	2200	50 41	10000 36938		860 680		60400	135 355	700
Judique, Creignish and vicinity	3000		- 660	10600	500	23	44400		138		2600	80	
12 Pts. Hastings and Hawkesbury	10700		412	8500	160000	2500		21	48		300000	15	
13 West Bay, River Denys nd Malagawatch			245	387000			,		1040				
Total quantities	119134	2700	3520	423950	163500	3328	224302	528	9723	20	452100	1174	700
Rate	15	-	\$41/2	.1	·12	\$15	.30	\$5	\$41/2	\$10	.3	\$3	.6
Values	17870	405	15840	4239	19620	49920	67290	2640	43753	200	13563	3522	42

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# County of Inverness, Province of Nova Scotia, for the Year 1908.

							F	ZIND	3 OF	Fish	٠	į				•			Fish.	
Hake, dried, cwt.	Hake, sounds, lb.	Pollock, cwt.	Hallibut, lb.	Trout, lb.	Shad, brls.		Alewives or gas- pereau, brls.	Eels, brls.	Oysters, brls.	Clambs, brls.	Flounders, lb.	Tom Cod or frost fish, lb.	Squid, brls.	Coarse and Mixed fish, brls.	Fish oil, galls.	Fish as bait.	Fish as manure, brls.	Seal skins, number.	TOTAL VALUE OF ALL	Number.
						)			]						}			. ,	\$	
2		19											9	190	920	200	25	8	15922	1
99		28	1000	1500		1200		72		35			194		320 <i>ə</i>	680			48845	2
165		50	2000	500			25	5				, ^	300	85	400	580	80		23302	3
126		55	1540		20								130	83	195	<b>51</b> 5	200		16035	4
15			195		2	1000							70	65	35	50	25		6097	5
75 70			750	1000		2400	500	50 10		100			25 100	95 90	140 180	195 185			8173 5574	
70													55	130	190	180			6019	8
50 545	250			2000 100		400		34 3					60 30	165	300 100	1085 505			11065 24160	9
75				2900		4000		13					10			410			19650	11
				1000		2000		56	30		16500		4500		40	235			89389	12
								59	498			9000			290	675			14600	13
1292	250	152	5485	9000	22	11000	525	302	528	135	16500	9000	5483	903	5990	5495	410	8		
\$3	• 25	\$3	.10	·10	\$10	.4	\$4	\$10	\$6	\$2										-
3876	62	456	548	900	220	440	2100	3020	3168	270	495	270	21932	1806	1790	8242	205	10	288731	

9-10 EDWARD VII., A. 1910

#### RECAPITULATION.

OF the Yield and Value of the Fisheries in district No. 1 (Island of Cape Breton) for the Year 1908.

Kinds of Fish.	Quantity.	Value.	Total Value.
		\$	\$
Salmon, fresh	164,002 3,000 3,200	24,689 450 640	25,779
Herring, salted Brls Lb.	38,912 757,302	175,103 7,573	
Mackerel, fresh Lb. safted Brls.	367,530 30,480	44,103 457,200	182,676
Lobsters, preserved in cans. Lb.  The fresh in shell Cwt.	753,918 3,222	226,175 16,110	501,303
Cod, dried	58,622	263,798	242,285
fresh or green. Lb. tongues and sounds Brls.	136	1,360	265,158
Haddock, fresh Lb.  dried Cwt.  finnans Lb.	$ \begin{array}{c c} 10,62,806 \\ 22,795 \\ 270,700 \end{array} $	31,883 68,385 16,222	
Hake, dried	1,702 552	5,106 117	116,490
Pollock, dried	8,167 138,145 20,625		24,501 13,814 2,062
Shad, salted	67,000 1,469		5,876
Eels       "         Oysters       "         Clams       "         Flounders       Lb.	2,054 754 5,711 297,659		4,524 11,422
Tounders. Tom-cod.  Squid.  Mixed and coarse fish.	63,126 12,069 2,492		1 005
Fish oil Galls Fish as bait Brls. Fish as fertilizer 2"	1 01100		2,050
Seal skins			. 1,523,74
ıı 1907			242,420

#### RECAPITULATION.

Of the Number and Value of Crafts and Fishing Gear, &c., and the Number of Fishermen in the Island of Cape Breton for the Year 1908.

Number.	Description.	Value.	Total Value
		\$	\$
108 2,930	Fishing Vessels (2,027 tons)	52,870 88,306	144.000
15,148 23	Gill-nets (326,197 fathoms). Seines and cod-nets (625 fathoms).	118,837 620	141,676
$\begin{array}{c} 23 \\ 3,167 \\ 12,323 \end{array}$	Trap-nets Trawls, (long fines). Hand lines	15,400 25,427 11,343	
213 30	Smelt nets Weirs	1,407 600	173,634
50 134,575	Lobster canaries	47,300 102,142	149,442
47 1,506 395 65	Freezers and ice houses Smoke and fish houses Piers or wharfs (private). Turs and smacks	31,050 116,428 116,575 17,345	143,442
09	rugs and smacks	11,010	281,398
			746,150

Number of fishermen	in vessels	 	543
	boats		
Persons employed in	canneries, etc	 	1,487
2 0		_	
Total.		 	7,358

### 9-10 EDWARD VII., A. 1910

### NOVA SCOTIA,

Return showing the Number. Tonnage and Value of Vessels, Boats, Nets, &c., the Fishing Industry in the County of Cumberland,

			Fish	ing Vi	ESSEL	S ANI	Волт	s.			,					Fish	ING (	GEAR
	Districts.		v	essels.		•	Boats.		(	Gill Ne	ts.	5	Seine	s.	T N	rap ets.	Tra	wls.
Number.	DISTRICTS.	Number.	Tonnage.	Value.	Total Fishermen.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value,
	Cumberland County.			\$			\$				\$			\$		\$		
	Pugwash Shoreand Malagosh Port Philip, North-	1	23	700	4	74	2579	76	156	3080	780	1	60	30			130	. 150
4 5	port and Amherst Shore Wallace River					86 14 10 5	4300 220 150 75	140 14 10 5	522 15 10	10440 180 200							34	350
	can					3	38	6	4	90	12							
8 9 10	Minudie to Apple River Advocate Spencer's Island Port Greville	i			4	15 24 6 11	217 440 115 176	27 35 9 20	105 70 15 24	3820 2680 525 840	250 65						8 16 5 12	150 96
11	Parrsboro and Two Islands					10	160	20	26	900	91						9	75
	Total	3	48	1200	10	258	8470	362	947	22755	3815	1	60	30			214	921

# DISTRICT No. 2.

and the Quantity and Value of all Fishing Materials and other Fixtures used in Province of Nova Scotia, for the Year 1908.

or l	Мат	rer	IALS.	-	-		Lobs	STER P	LANT.		(	OTHER :	Fixt	URES U	SED :	in Fis	неі	RIES.	FISHING	
Wie	ers.		nelt ets.	Han Line			Can- eries.	Tra	ps.	oyed in	ar	rezers id Ice ouses.	and	oke Fish uses.	а	iers nd arfs.	Ste	lugs, eamers Sm'cks	WHOLE GEAR.	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons employed Canneries.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Number.
	\$		\$		\$		\$		.\$	-		\$		\$		\$		\$	\$	
		10	300	15	8	23	29700	44130	34330	269					• • • •					
		36 12 27	720 225 1080			8	1125	8800	6800	31			12	140						
1 2 3	80 100 180		10	40 85 20 50	45 90 22 55			150 1200 50	75 600 25		1	60	3 12 3 5	40 180 30 75	,		2 1	4800 260		
2 - 8	260		2335	35 245		-	30825	54330	41830	300		60	39	60 525			3	5060		

9-10 EDWARD VII., A. 1910

### RETURN showing the Kinds and Quantities of Fish and Fish Products in the

					Kind	s of F	ISH.			
Number.	Districts.	Salmon, fresh, lb.	Herring, salted, brls.	Herring, fresh, lb.	Herring, smoked, lb.	Mackerel, fresh, lb.	Lobsters, preserved in cans, 1b.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Haddock, fresh, cwt.
	Cumberland County.									
2	Pugwash Gulf Shore and Malagash Port Philip, Northport and Am- herst Shore Wallace River River Philip	1000	150	6000	60000		46068 54720	35	20	
	La Planche Nappan and Maccan Minudie to Apple River Advocate Spencer's Island Port Greville. Parrsboro' and Two Islands	6000 4000 5000	35 50 30	700 2000 400 600	100 400			9 140	22 70 30 40 35	500 3:0 500
	Totals					3650	515328	187		2700
	Values\$	2400	1732 50	111	13226	438	154598 40	1309	1161	81

<sup>\*</sup> Large increase accounted for by transference of 25 licenses from New Brunswick to Nova Scotia this

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County of Cumberland, Province of Nova Scotia, for the year 1908.

						Kind	s of	Fisi	Ι.									=
Haddock, dried, cwt.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lb.	Trout, lb.	Shad, brls.	Smelts, lb.	Alewives or Gaspereau, brls.	Eels, brls.	Oysters, brls.	Clams, brls.	Flounders, 1b.	Tom cod or frost fish, lb.	Coarse and mixed fish, brls.	Fish as bait, brls.	Fish as manure, brls.	TOTAL VALUE OF FISH.		Number.
10 35 20 28 20 113	30 25 15 8	160 35 12 18 225	800 1200	100 1000 750 400 160 300 2710	8 75	17500 *180000 13200 20400 1500 1000	103 50 25 25 30	5	381 50 10  441	20 40	1000	20000	15	6 50 8 10 6	a20200 6560  12 600 16 40 24 26912	45,996 1,666 1,928 330 205 2,426 2,519 1,284 1,612 729	00 00 00 00 00 50 50 00	2 3 4 5 6 7 8 9 10 11
339		562 50	510	271	830	16352	932	130	2646	150	30	600	30	693	13456			

year. aA large quantity of squid drifted ashore and were used for manure.

9-10 EDWARD VII., A. 1910

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c.,

			Fish	ing Vi	esel:	S AN	D Boar	rs.								Fish	ING	GEAR
	Districts.		v	essels.			Boats.			Gill Ne	ets.		Seine	es.	T	rap ets.	Tra	wls.
Number.		Number.	Tonnage.	Value.	Total Fishermen.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.
	Colchester Co.			\$			\$				\$							\$
3 4	Sterling Stewiacke Five Island Economy Little Bass Riv. to					20 135 7 2	1000 1325 240 100	245 14 6	265 ···	700	2065						7	300
6	Highland Village Great Village to Queen's Village.		1	}		12 15	480 455						•					
						191	3600	339	294	18250	3785	-			-		7	300

# RETURN showing the kinds and quantities of Fish and Fish Products in the

=															]	Kinds
Number.	Districts.	Salmon, fresh, lb.	Salmon, preserved in cans, 1b.	Salmon, salted or smoked, lb.	Mackerel, fresh, lb.	Mackerel, fresh, lb.	Lobsters, preserved in cans, lb.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lb.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, 1b.	Hake, dried, lb.	Hake, sounds, lb.	Pollock, cwt.
	Colchester Co.	_														
2 3 4 5	Five Island Economy	490					53856		250 20 25		4000 2000 500	25 5		15 5		7
	Totals						53856		295		6500	30		20		7
	Values \$	5179.50					16156 · 80		1327 · 50		195	90		50		17.50

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in the County of Colchester, Province of Nova Scotia, for the Year 1908.

OR	MAT	ľER	IAL.		100		Lobs	TER P	LANT.		(	THER	Fixt	URES U	SED :	in Fis	HEI	RIES.	FISHING	
W	eirs.		nelt	Ha Lin			anne-	Tra	ps.	employed in ries.	ar	eezers id Icē ouses.	and	roke Fish uses.	a	iers nd harfs.	Sto	Fugs, eamers Sm'cks	WHOLE GEAR.	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons empl	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Number.
	\$		\$		\$		\$		\$			\$		\$		\$		\$	\$	
$\begin{array}{c} \cdot \cdot \\ 1 \\ 3 \\ 2 \\ \cdot \cdot \\ \hline 6 \end{array}$	150 300 500		300	5			1300		2200				2  4 8 14	550 150 300						1 2 3 4 5

# County of Colchester, Province of Nova Scotia, for the Year 1908.

FISH	ι.																	
Halibut, lb.	Trout, lb.	Shad, brls.	Smelts, lb.	Alewives or gaspereau, brls.	Bass, lb.	Pickerel, lb.	Eels, brls.	Sardines,	Oysters, brls.	Clams, brls.	Flounders, 1b.	Tom Cod or Frost fish, 1b.	Squid, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	TOTAL VALUE OF ALL FISH.	Nambon
																	cts.	
4200	200 1800 1200 1200	5	12500	105	400				150	180				180 20	32	500	18,201 80 3,315 00 2,527 00 408 50	1 2 3 4
• • • • • • •	600	11			300									20			407 00	624
		8															2,336 00	$\epsilon$
4200	5000	25	12500	105	900				150	180				220	32	500	27,195 30	
420	500	250	875	420	90		-		900	360				66	48	250		

9-10 EDWARD VII., A. 1910

Return showing the Number, Tonnage and Value of Vessels and Boats and the Quan in the county of **Pictou**, province

		-	Fish	ING VE	SSELS	8 ANI	о Волт	rs.	,		2 2000 100	==				Fish	IING	GEAR
	Districts.		Vě	essels.			Boats.		(	Gill <b>N</b> e	ts.	2	Seine	s.		rap ets.	Tra	awls.
Number.		Number.	Tonnage.	Value.	Total   Fishermen.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Numper.	Value.
2 3 4 5 6 7	Pictou Connty.  West Pictou  Pictou Island  Central Division  Southern Division.  Merigomish Island  North Beach  Ponds  Lismore	i		900		176 57 5 23 6 8 14 10 299	4,440 2,950 120 350 120 100 180 150 8,370	100 7 25 6 8 14 10		580 320 6,480	470 100 1,850 870 600 850 760						12 5 4 5 4 31	50 20 20 16 20 120

# RETURN showing the kinds and quantities of Fish and Fish Products in

=											Kinds
Number.	Districts.	Salmon, fresh, lb.	Herring, salted, brls.	Herring, fresh, lb.	Mackerel, fresh, lb.	Mackerel, salted, brls.	Lobsters preserved in cans, lb.	Cod, dried, cwt.	Haddock, fresh, lb.	Haddock, dried, cwt.	Hake, dried, cwt.
	Pictou County.						,				
1 2 3 4 5 6 7 8	Central Division Southern Division. Merigomish Island North Beach. Ponds	740 14500 4220 4350 3600 2100	180 120	36000 15000 120000 61500 3200 5000 42300 12600	980 3000 800 590 350 2500 600 1209	20	306000 167664 15696	38 10 60 42 5 6 8 12	800 300 450 500 650	14	17 18 7 3 6 8 11
	Totals	29510	300	295600	10030	20	532560	181	2700	14	70
	Values	4426 50	1350	2956	1203 60	300	159768	814 50	81	42	175

tity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry of Nova Scotia, for the year 1908.

OR MA	ATERIALS	ş.			` <b>L</b> ов	ster P	LANT.			OTHER :	Fixt	URES U	SED :	in Fis	HE	RIES.	Fishing rear.	
Weirs	Smelt Nets.	Ha Lir			anne-	Tra	aps.	employed in les.	a	neezers nd Ice louses.	and	noke Fish uses.	a	iers nd narfs.	St	Fugs. eamers Sm'cks	WHOLE FIS.	
Number.	Number. Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons empl	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value,	Value.	Number.
	12 360 9 270 3 118 6 300 5 300 5 300 5 45 1648	5 6 5 6 5 6 5	3 3 3 3	3 1 1 1 2 1	14,600 10,300 300 600 300 1,300 300 27,700	1,800 2,000 3,200 1,800	17,525 650 1,000 1,909 900	8			5 3 4 2 2 2	100 35 60 40 35	i	25		6,300		1 2 3 4 5 6 7 8

# the County of Pictou, Province of Nova Scotia, for the Year 1908.

of Fish	ι.											
Trout, 15.	Smelts, lb.	Alewives or Gaspereau, brls.	Eels, brls.	Oysters, brls.	Clams, brls.	Tom Cod or Frost Fish, lb.	Squid, brls.	Coarse and mixed Fish, brls.	Fish as bait, brls.	Fish as manure, brls.	TOTAL VALUE OF ALL FISH.	Number.
				Annual Principles	and a second	•					\$	
300 500 370	14120 9000 1500 9300 6700 4800	50 12	25 5 6 7 9	16 25	18	1800	10 25 25 10	22	425 500 27 16 30 46 30	1700	97208 00 53294 20 2933 00 8156 80 1521 00 1742 00 14876 00 781 00	1 2 3 4 5 6 7 8
1270	45420	62	58	41	18	1800	150	22	1074	5340	180512 00	
127	3179 40		580	246	36	54	600	44	1611	2670		

9-10 EDWARD VII., A. 1910

Return showing the Number, Tonnage and Value of Vessels and Boats and the Quan in the county of Antigonish, Province

		-	Fısнıı	NG VES	SELS	AND	Волтя.				Fi	SHING
			Ve	ssels.			Boats.		(	Gill-Ne	ts.	Trap
	Districts.									1		
Number.		Number.	Tonnage.	Value.	Total fishermen.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.
	Antigonish County.			\$			\$				\$	
	Harbour Au Bouché Linwood and Cape Jack	3	45	950	7	77	1373	87	471	9462	2170	3
	Tracadie, Bayfield, Monk's Head and South Side Antigonish Harbour North Side of Antigonish Harbour,			* . *		83	1518	85	130	2700	676	27
	Lakevale and South Side Cape George					49	905	65	112	2280	547	6
	North Side Cape George and George- ville			,		18	298	31	39	780	225	
5	Malignant Cove, Doctor Brook, Arisaig, Knoidart and Moydart					30	493	39	79	1460	426	7
1	Totals	3	45	950	7	257	4587	307	831	16682	4044	43

# RETURN showing the kinds and quantities of Fish and Fish Products in the

			-		K	INDS	of Fish				
Number.	Districts.	Salmon, fresh, lb.	Herring, salted, brls.	Herring, fresh, lb.	Mackerel, fresh, lb.	Mackerel, salted, brls.	Lobsters, preserved in Cans, lb.	Cod, dried, cwt.	Haddock, fresh, lb.	Haddock, dried, cwt.	Hake, dried, cwt.
	Antigonish County.					٠					
1	Harbour au Bouché, Linwood and Cape	5900	337	14500	9750	157	42816	189	360	31	73
	Tracadie, Bayfield, Monk's Head and South Side Antigonish Harbour	36500	60	6600			26688	125		6	10
	North Side Antigonish Harbour Lakevale and South Side Cape George	18500	75	4400	1700	1	56592	302		53	161
	North Side Cape George and George- ville		41	900	1525		9696	54		35	148
v	Knoydart and Moydart	9500	95	2200	1900	1	23376	80		52	213
	Totals	70400	608	28600	17025	161	159168	750	360	177	605
	Values	10560	2736	286	2043	2415	47750 40	<b>337</b> 5	10 80	531	1512 50

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tity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry of Nova Scotia, for the year 1908.

GEAR (	or M	ATER	IAI	S				Lor	STER :	PLANT	7.		Отне	R Fix	TURES 1	USED	in Fis:	HERII	ES.	
Nets.	Trav	wls.		ets.	Ha Lir	and nes.		an- ries.	Tra	ips.	oyed in	1	reezers t Ice ouses.	F	te and ish		ers & narfs.	Ste	igs, amers nacks.	
Value,	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons Employed Canneries.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.
\$		\$		\$		\$		\$		\$					\$		\$		\$ .	
750	78	293	28	53	143	80	1	1000	6000	3000	40	1	1200	40	469	1	2000	2	100	1
6450	33	151	60	152	98	49	1	850	2750	1500	24	2	1600	- 36	301	6 0 0 0		2	300	2
1200	42	210	2	80	57	25	2	2400	6100	3660	47	1	1200	11	168					3
	16	110			14	7	1	700	2500	1500	20			8	120					4
1200	28	157	2	80	46	20	1	1400	3497	2087	24	1	1200	15	221					5
9600	197	921	92	365	358	181	6	6350	21847	11747	155	5	5200	110	1279	1	2000	4	400	

# County of Antigonish, Province of Nova Scotia for the year 1908.

						` K	INDS	5 O	F FISH.								The second second
Hake, sounds, lb.	Pollock, cwt.	Trout, lb.	Smelts, lb.	Alewives or Gaspereau, brls.	Bass, 1b.	Eels, brls.	Oysters, brls.	Clams, brls.	Flounders, 1b.	Tom Cod or Frost Fish, 1b.	Squid, brls.	Coarse and Mixed Fish, brls.	Fish Oil, Galls.	Fish as Bait, brls.	Fish as Manure, brls.	TOTAL VALUE OF ALL FISH.	Number.
																\$ ets.	
200	27	50	3620	1		13			6450	1140	284	372	` 569	427	662	23,812 90	1
30	13	225	11200	7	1000	52	124	3	2900	1200	65	116	346	454	270	18,490 20	2
338	2	420	3000			7			4900		12	123	132	401	560	24,047 20	3
350									1000		3	95	148	122	90	4,595 20	4
630		175	3000			4					22	167	520	184	234	11,574 80	5
1548	42	870	20820	8	1000	76	124	3	15250	2340	386	873	1715	1588	1816		
387	105	87	1457 40	32	100	760	744	6	457 50	70 20	1544	1746	514 50	2382	908	82,520 30	

9-10 EDWARD VII., A. 1910

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the County of Guysborough, Province of Nova Scotia, for the year 1908.

,		Number.		1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	Trap-Nets.	Value.	<b>6</b> €	72.472 52.02.03.03.03.03.03.03.03.03.03.03.03.03.03.
<u> </u>	Trap	Number.		——————————————————————————————————————
FISHING GEAR OR MATERIALS.	38.	Value,	€€	120 125 150 150 150 1000 1000 1500
R OR J	Seines	Fathoms.		250 250 1100 1180 1180 1180 1190 1190 1190 119
GEA		Number		<u> </u>
FISHING	ts.	Value.	₩	850 850 850 850 850 850 150 150 150 150 150 150 150 150 150 1
	Gilt-Nets	Fathoms.		1100 1200 2600 1000 2000 1500 2000 1000 1200 1000 1200 1000 10
		Number.		0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
		Men.		00.00 00.00
TS,	Boats.	Value,	66	10000 2500 6000 1200 1200 1200 1200 1200 1200 12
AND BOA		Number.		2488884406848888888888888888888888888888
FISHING VESSELS AND BOATS.		Total Fisher-		83.9 104.4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Fishing	Vessels.	Value.	<b>€</b> ⊕	88000 42000 1200 9500 3300 23400
	Ň	Tonnage.		111 1152 146 846 898
	1	Number.		0001H48
	,	Number. Districts.	Guysborough County.	1 Ecum Secum 2 Marie Joseph. 3 Liscomb and Spanish Ship Bay 4 Gegon. 5 St. Mary's Bay and River 6 Wine Harbour. 7 Port Hilford Bay and Iake 8 Holland's Harbour and Indian River 9 Port teckerton. 10 Country Harbour. 11 Country Harbour. 12 Isaac's Harbour. 12 Isaac's Harbour. 13 Drum Head. 14 Seal Harbour. 15 Codelles Harbour. 16 New Harbour. 16 New Harbour. 17 Tor Bay. 18 Larry's River. 19 Charlos Cove. 20 Cole Harbour. 22 Whitchead. 23 Raspberry and Dover. 23 Raspberry and Dover. 24 Canso and Canso Tittle.

800 25 4000 26 4000 28 3600 29 1500 31 1500 31 1500 32 1500 33 34 35 38 38 in the County of Guysborough, Province of Number. Trap-Nets. Value.03 00 H L H 10 00 00 Number. FISHING GEAR OR MATERIALS. 4945 Value. Seines. 120 100 120 2790 Fathoms. 26 Number. 7440 4270 5590 4450 7400 4900 14600 3200 5840 168190 Value. Gill-Nets. 11680 14880 8540 15600 10905 9350 |4800|329665 0086 29200 Fathoms. 247 130 130 130 130 1483 1483 1480 1480 320 17500 Number, wing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., Scotia, for the Year 1908. 1890 Men. 790 1320 1320 1200 1200 2860 2070 11240 1300 2080 1350 3140 1080 80580 BOATS.  $\Lambda$ alue. FISHING VESSELS AND BOATS. 1509 Number. men, Total Fisher-Nova 54800 Vessels, Value. 949 29 Tonnage. 62 Zmmber. 25 Fox Island Main
26 Half Island Cove
27 Philips Harbour
28 Queensport.
29 Feas Brook
30 Half Way Cove
31 Sandy Cove and Cook's Cove
32 Guysboro and Manchester
32 Fort Shoredam
34 St. Francis
35 Oyster Ponds.
36 Sand Point.
37 Middle Melford.
38 Mulgrave and Aulds Cove Guysborough County. DISTRICTS. υ<u>ρ</u> URN | Number. 22 22  $-5\frac{1}{2}$ 

9-10 EDWARD VII., A. 1910

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., in the County of Guysborough, Province of Nova Scotia, for the Year 1908.

	Number.		128.4700 F 80.0 11212475 3 F 80.0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
ngs, mers & acks.	Value.	66	16500
Stea	Number.		9
iers and	Value.	<b>9</b>	200 250 150 150 150 150 150 160 175 175 175 175 175 175 175 175 175 175
P. Wb	Number.		
roke Fish uses.	Value,	€.	300 1000 1000 1000 300 300 300 500 1100 1200 1200 1200 2900 2900 2900 29
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ezers l Ice uses.	Value.	op:	45 100 250 1200 1200 1200 1200 1500 1500 75000
Fre and Ho	Number.		<u> </u>
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leries.	Value.	60	300 1200 700 1200 1200 1200 1000 800 800 800 800 800 900 900 900 900
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SS.	$\Lambda$ alue.	0⊕	44.20 100 100 100 100 100 100 100 1
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irs.	Value.	€#	000000000000000000000000000000000000000
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l H	Number.		86 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Comment	Number.	Guysborough County.	Econo Secum   2 Marie Joseph   3 Liscomb and Spanish Ship Bay   4 Gegogin   5 St. Mary's and River   6 Wine Harbour   7 Fort Hilford's Bay and Lake   8 Holland's Harbour and Indian River   9 Port Beckerton   10 Fisherman's Harbour   12 Isaacs' Harbour   12 Isaacs' Harbour   12 Isaacs' Harbour   14 Seal Harbour   15 Codelles Harbour   16 New Harbour   16 New Harbour   16 Tor Bay   17 Tor Bay   17 Tor Bay   18 Larry's River   19 Coheles Cove   20 Cole Harbour   22 Ryhitehead   23 Raspberry and Dover   22 Ryhitehead   23 Raspberry and Canso and Canso Tittle   24 Canso and Canso Tittle   25 Cole Harbour   25 Raspberry and Lover   26 Cole Harbour   27 Rot Felix   28 Raspberry and Canso Tittle   24 Canso and Canso Tittle   27 Cole   28 Canso and Canso Tittle   28 Canso Andrew   28 Canso Andrew   28 Canso and Canso Tittle   28 Canso Andrew   2
	Trawls, Weirs, Nets, Lines, Canneries, Traps.	Trawls, Smelt Hand Canneries, Nets, Lines, Nets, Lines, Natue, Na	Trawls, Smelt Hand Canneries, Nets, Nets, Lines, Namber.  Wumber. Houses. Houses. Houses. Houses. Houses. Avalue.  Walue. Walue. Smacks. Smacks. Smacks. Swacks.

SESSIONAL PAPER No. 22

Return showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., in the County of Guysborough, Province of Nova Scotia, for the Year 1908.

		Number.		88.48.88.88.88.88.88	
70. 193	Tugs, teamers & Smacks.	Value,	<b>6/</b> €	1500 750 1500 8000	27590
HERT	Tugs, Steamers Smacks.	Number.		- : : : : : : : : : : : : : : : : : : :	15
IN FIS	Piers and Wharfs.	Value.	€€	1000 1500 4600 9800 1000 800 6000 7500	199 153700
SED	P. P. Wh	Number.			
URES U	Smoke and Fish Houses.	Value.	<b>6</b>	900 7150 3400 8600 1400 3500 3500 6850 2100 2450 3000 2450 3000 3000 3000 3000 3000 3000 3000 3	737 106230
FixT	Sm and Ho	Number.		22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	737
OTHER FIXTURES USED IN FISHERIES.	Freezers and Ice Houses.	Value.	€€ ,	200 15000 16000 1200 10000	37 126795
	Fre and Ho	Number.		H C 4 : H H : : : : : : : : : : : : : : : :	
	s's	Persons Emp		32	330
ANT.	Traps.	,9ulsV	<b>6</b>	80000	64640
LOBSTER PLANT.	Tra	Number,		8500	25000 102100
Lobs	Canneries.	.9nlsV	<del>\$\$</del>	2000	
	Can	Number.			27
	nd 1e.	Value.	<del>60</del>	4021 6024 4031 6034 6034 6034 6034 6034 6034 6034 6034	890 4524 3863
ALS.	Hand Line.	Number.		44 622 623 624 634 634 637 637 638 638 638 638 638 638 638 638 638 638	4524
ATER	elt ts.	Value.	€9	300 200	
B M.	Smelt Nets.	Number.			110
AR 0	irs.	Value.	6/9		30
GE GE	Weirs.	Number.			4
FISHING GEAR OR MATERIALS.	Trawls.	·ən[æ]	€€	400 11150 600 980 550 1000 640 380 380 380 500 160	25540
	Tra	Number.		1115 115 60 60 100 100 100 100 100 100 100 100 1	2615
	Taxonina year	Zan Januari Ja	Guysborough County.	25 Fox Island Main 26 Half Island Cove 27 Philip's Harbour 28 Queensport 29 Peas Brook 30 Half Way Cove 31 Shudy Cove and Cook's Cove 32 Guysboro' and Manchester 33 Fort Shoreham 34.St. Francis' 35 Oyster Ponds 36 Sand Point 37 Middle Melford 38 Mulgrave and Aud's Cove	Totals

9-10 EDWARD VII., A. 1910

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Guysborough, Province of Nova Scotia, for the Year 1908.

1	Zumber.	12 22 25 25 25 25 25 25 25 25 25 25 25 25
Ë	Sounds, 1b.	150 150 150 150 150
HAKE	Dried, cwt.	20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
.:	Smoked (finnan haddies), lb.	
Нарроск	Dried, cwt.	250 05 2 2 3 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5
HA	Fresh, lb.	300 300 800 800 300 1500 1500 1500 800 800 800 1500 800 1500 800 800 800 800 800 800 800 800 800
č	Tongues and Sounds, bris.	∞ % % n n n n n n n n n n n n n n n n n
Cop.	Dried, cwt.	550 550 600 150 150 150 150 150 150 150 1
BS.	Fresh in Shell, cwt.	67 196 44 44 48 216 52 52 52 60 1111 129 129 120 120 120 120 120 120 120 120 120 120
LOBSTERS	Preserved in cans, lb.	41376 9600 9600 25920 24864 14400 17664 12672 31968 31968
EREL.	Salted, brls.	22 22 1 11 13 13 140 100 100 100 100 100 100 100 100 100
MACKEREL.	Fresh, lb.	1200 1200 1500 1500 1500
25	Smoked, lb.	
HERRING.	Ltesh, lb.	1500 1500 2000 300 1000 1000 1200 1500 1500 1500 1500 15
	Salted, brls.	100 120 150 150 150 150 150 150 150 150 150 15
	Salted or smoked, lb.	100 100 2300 300 300
SALMON.	Preserved in cans, lb.	100
32	Fresh, lb.	1000 150 800 8000 8000 8000 4000 1000 1000 1000
	Districts.	1 Ecum Secum. 2 Marie Joseph. 3 Liscomb and Spanish Ship Bay. 4 Gegogin. 5 St. Mary's Bay and River GWine Harbour. 7 Port Hilford and Lake. 8 Hollands Harbour and Indian River. 10 Fisherman's Harbour. 11 Country Harbour. 12 Isaac's Harbour. 13 Drum Head. 14 Seal Harbour. 15 Goddles Harbour. 15 Low Harbour. 16 New Harbour. 17 Tor Bay. 17 Tor Bay. 18 Larry's River. 19 Charlos Gove. 20 Cole Harbour. 19 Charlos Cove. 20 Cole Harbour. 21 Port Felix.
The state of the s	Number.	1988 4000 0000000000000000000000000000000

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24 Canso and Canso Tittle. 10000 25 Fox Island Main 25 Half Island Cove 27 Philip's Harbour 28 Queensport 29 Peas Brook 30 Half Way Cove 32 Guysboro and Manchester 7120 33 Fort Shoreham 34 St. Francis 35 Oyster Ponds 35 Middle Melford. 80000 38 Middle Melford. 80000 38 Middle Melford. 80000	Totals	Values

RETURN showing the Kinds and Quantities of Fish and Fish Produts in the County of Guysborough, Province of Nova Scotia, for the Year 1908.

9-10 EDWARD VII., A. 1910 | Number. 82 VALUE OF ALL FISH. TOTAL 8,591 11,174 9,634 11,082 8,837 13,111 13,111 18,438 18,534 8,531 28,532 58,215 58,215 21,883 .03 Seal Skins, number, 40100 400 014 Fish as manure, brls. Fish as bait, brls. 623454 Fish Oil, galls. 82228 200 388294. Coarse and Mixed fish, bris. 2000 Squid, bris. 200200 Tom cod or Frost fish, lb. 2000 Flounders, lb. 20x - 4 Clams, bris. 0.00000 Eels, bris. 1005004 ·100004100 Alewives or Gaspereau, bris. 1000 Smelts, lb. Shad, bris. 000 200 Trout, Ib. 1100 18000 5500 2000 2000 3000 3000 3460 500 1100 200 200 4000 3800 Halibut, lb. 2333 300 Pollock, cwt. 10 Fisherman's Harbour 11 Country Harbour 12 Isaac's Harbour 13 Drum Head... 14 Seal Harbour 15 Goddles Harbour 16 New Harbour 17 Tor Bay... 18 Larry's River, 19 Charlos Cove. 5 St. Mary's Bay and River 6 Wine Harbour. 7 Port Hilford and Lake... 8 Holland's Harbour and Ecum Secum..... Raspberry and Dover, ... Indian River.... 20 Cole Harbour.
31 Port Felix.
42 Whitehad
23 Raspberry and Dover. Guysborough County. DISTRICTS. Port Beckerton.

| Number.

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SESSI	ONAL	PAPER	No.	22

SESSIONAL I AT ER NO. 22		
240,025 70 24 24,434 20 25 24,434 20 25 21,457 70 24 21,457 70 27 21,457 70 27 22,858 50 30 28,858 50 30 28,858 50 30 28,858 50 30 28,858 50 30 28,858 50 30 28,858 50 30 28,858 50 30 28,858 50 30 28,858 50 30 38,124 50 30 38,174 50 30 38,174 50 30		934,511 80
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2f (Canso and Canso Tittle. 25 Fox Island Main. 26 Half Island Cove. 27 Philips Harbour. 28 Queenspore. 29 Peas Brook. 30 Half Way Cove & Cove. 31 Sandy Cove & Cook's Cove. 32 Fox Brook. 33 Fort Shorelam. 34 St. Francis. 35 Oyster Ponds. 37 Middle Melford. 38 Middle Melford. 38 Middle Melford.	Totals	Values

9-10 EDWARD VII., A. 1910

er	1		Number.		128.47.37.80.01128.47.1 37.18.28.28.28.28.28.28.28.28.28.28.28.28.28
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als ar 98.		Trawls.	Number.		0.000 0.000
Materi ar 190		Trap-nets.	Value.	<b>⊕</b>	2200 22200 4000 800 2220 800 800 800 800 800 800 800
ng I	IALS.	Trap	Number.		8774 01 11 11 11 11 11 11 11 11 11 11 11 11
Value of all Fishing Materials and other a Scotia, for the Year 1908.	FISHING GEAR OR MATERIALS	· S	Value.	<b>₩</b>	20650 3150 3150 3500 34650 13300 13300 1500 1750 1750 1750 1750 1750 1750 17
of a	EAR O	Seines.	L'athoms.		25900 9000 10000 1
Sc.	NG G		Number.		654 252 252 253 253 253 253 253 253 253 253
	Fish		Value, ×	<b>6</b> €	7500 20000 20000 30000 22500 1450 2500 2500 2500 1335 1375 1375 1375 1375 1375 1375 1375
the Quantity and Value of all Fishing Material.  Province of <b>Nova Scotia</b> , for the Year 1908.		Gill-nets.	Fathoms,		30000 84000 84000 128000 10000 10000 10000 115800 6600 1200 6840 6840 6840 6840 6840 12180 12180 6840 6840 6840 6840 6840 6840 6840 68
l the ;, Pro			Number.		1500 4200 1400 6000 1900 1900 1900 1900 1900 1900 19
Boats and Halifax,			Men.		90000000000000000000000000000000000000
Connage and Value of Vessels and Boats and Fishing Industry in the County of <b>Halifax</b> ,	Boats.	Boats.	Value.	69	3000 5900 6500 6500 6500 6500 11500 1179 2200 1180 300 445 1741 445 1741 445 1741 445 1741 445 1741 445 1741 1741
Vessels and e County of	S AND		Number.		249 249 249 249 249 250 200 200 200 200 200 200 200
Ve he C	SSEL		Total Fishermen.		
Value of stry in th	FISHING VESSELS AND BOATS	Vessels.	.auleV	€÷	1800 3000 400 3000 2000 1000 400 400 1000 1000 11000 125 125 125 125 125 125 125 125 125 125
and V Indus	Fis	Ves	Tonnage.		83 84 84 85 85 87 87 87 87 87 87 87 87 87 87 87 87 87
ing			Number.		
RETURN showing the Number, Tonnage and Fixtures used in the Fishing Ind		DISTRICTS,	• *	Halifax County.	1 North Shore 2 East St. Margarets 3 Indian Harbour 4 Pegzy s Cove 5 Prospect. 6 Prospect. 7 Terrance Bay 9 Sambro. 10 Ketch Harbour 11 Portuguese Cove 12 Herring Cove 12 Herring Cove 13 Ferguson's Cove 14 Bedford and Grand Lake 15 Halfar 16 Dartmouth, Eastern Passage and Devil's 18 Halfar 16 Dartmouth, Eastern Passage 17 Cov Bay and Lawrencetown 18 Seaforth and Threefathom Harbour 18 Seaforth and Threefathom Harbour 19 West Chexetcook 22 Musquodoboit Harbour 22 Musquodoboit Harbour 22 Jedore 23 Jedore 24 Glam Harbour and Owl's Head 25 West Ship Harbour 26 East Ship Harbour
1,			Number.		1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

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27 Pleasant Harbour and Tangier.	28 Pope's Harbour and Gerrard's Island 29 Spry Bay, Taylor Head and Mushaboon.	30 Sheet Harbour and Sober Island	32 Quoddy and Harrigan Cove	34 Mitchell's Bay and Ecum Secum	Totals	

9-10 EDWARD VII., A. 1910

RETURN Showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the County of Halifax, Province of Nova Scotia, for the Year 1908.

	l G	Number.		1500 11 12 12 12 13 14 14 15 15 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16
	Tugs, Steamers and Smacks.	Value,	60	
ERIES	Stea	Number,		0 0 1
IN FISH	Piers and Wharfs,	.Value,	€9	6000 11250 11250 11250 11750 1
SED	M	Number		658888888888888 2 2 28888888888888888888
OTHER FIXTURES USED IN FISHERIES.	Smoke and Fish Houses.	Value,	€	
B FI	an B	Number,		43588984189894551 487217888781
Отнк	Freezers and Ice Houses.	Value.	<del>99</del>	
	F Lce	Number.		mm
	ni bəyo	Persons empl		888
ANT.	Traps.	Value.	<b>≎</b>	600 830 830 830 830 830 830 830 840 850 850 850 850 850 850 850 850 850 85
LOBSTER PLANT.	Tra	Number.		1300 2500 1700 1700 1700 1000 1000 1000 1700
Lob	Canneries.	Value,	O.	2000 900 9000 20000 10000 10000
	Car	Number.		
R OR	Hand Lines.	Value,	<b>⊕</b>	90 82 82 82 82 82 83 83 84 4 88 8 84 9 8 8 8 8 8 8 8 8 8 8 8 8
FISHING GEAR OR MATERIALS.		Number.		2700 1000 1000 1000 1000 1000 1000 1000
FISHIN	Smelt-nets.	Value.	6/9	45.0 30 10
	Sme	Number.		
	DISTRICTS.	Уитьет.	Halifax County.	North Shore   Bast St. Margarets.   Indian Harbour   Peggy's Cove   Dover   Prospect.

SESSIONAL PAR	PER	N
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× 2 0 1 2 0 4 0	926	-
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. 12 8 8 8 1 E		
1280 3500 900 4200 6844	49624	-
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300 1200 1000 1400 2500	16325	-
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84 4 4 8 8 4 8	4337	
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25 40 10 10 25 25	885	
	96	-
27 Pleasant Harbour and Tangier. 28 Pope's Harbour and Gerard's Island. 29 Spry Eay, Taylor Head and Mushaboon. 30 Sheet Harbour and Sober Island. 31 Reever Harbour and Fort Dufferin. 32 Quoddy and Harrigan Cove. 33 Moser River and Smith's Cove. 34 Mitchell's Bay and Eeun Secun.	Totals	

9-10 EDWARD VII., A. 1910

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Halifax, Province of Nova Scotia, for the Year 1908—Continued.

11	Mumber,	H 20 2 4 70 10 10 10 10 10 10 10 10 10 10 10 10 10
	Hake, sounds, lb.	100 100 100 100 100 100 100 100 100 100
	Hake, dried, cwt.	1200 1200 1200 880 880 1350 1350 122 123 1350 140 150 150 150 150 150 150 150 150 150 15
	Haddock, smoked finnsn haddies, lb.	17.00
	Haddock, dried, cwt.	25.0.0 25.0.0 35.0.0 60.0
	Haddock, fresh, lb.	5000 5000 2000 10000 12000 12000 12000 12000 12000 100000 100000 100000 100000 100000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000
	Cod, tongues and sounds, bris,	ФИФИДФРАИНЕЕ
	Cod, dried, cwt.	260 1500 400 3000 25000 25000 350 350 350 350 350 350 350 350 350
Fish.	Lobsters, fresh in shell, cwt.	0.00 1 0.00 0.00 0.00 0.00 0.00 0.00 0.
KINDS OF FISH.	Lobsters, preserved in cans, lb.	3360 60960 60960 37152 61248
×	Mackerel, salted, brls,	040 040 010 010 010 010 010 010 010 010
	Mackerel, fresh, lb.	60000 100000 110000 112000 112000 150000 50000 50000 50000 5000 5
	Herring, smoked, Ib.	2000
•	Herring, fresh, lb.	2000 330000 20000 20000 90000 90000 2000 1000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10
	Herring, salted, brls.	175 1300 600 1800 1000 1000 1000 500 500 500 500 500 121 121 121 123 133 133 133 133 133 133
	Salmon, salted or smoked, lb.	3200 900 2200 3200 3200 1160 1176
	Salmon, fresh, lb.	1100 3000 13000 13000 3000 3000 3000 12000 12000 12000 12000 487 487
	DISTRICTS.	Halifax County.  1 North Shore 2 East St. Margarets 3 Indian Harbour 4 Peggy's Cove. 5 Dover 6 Prospect. 7 Terrance Bay 8 Pennant 9 Sambon. 11 Portuguese Cove 12 Herning Cove. 13 Fengueon's Cove. 14 Bedford and Grand Lake 15 Halifax. 16 Dartmouth, Eastern Passage and Devil's Island 17 Cow Bay and Lawrencetown. 18 Seaforth and Threefathom Harbour. 19 West Chezetcook 22 Bast Chezetcook 23 Jedgore 24 Clam Harbour and Owl's Head
(1.	Number.	122242222222222222222222222222222222222

22,23	ಜಾನಿಷ್ಟ	282		
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			1700	102
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			1115580	133869.60
			8000	160
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	2300	009	5151	95 772.65
60 700 150	95 1000 250	400	37913	5686.
25 West Ship Harbour. 26 East Ship Harbour and Tangier. 27 Pleasant Harbour and Tangier.	29 Spry Bay, Taylor Head and Musha- boon. 30 Sheet Harbour and Sober Island	21 Deaver Inarcoun and a grant of 22 Quoddy and Harrigan Cove.  33 Moser River and Smith's Cove.  34 Mitchell Bay and Ecum Secum.	Totals	Values

9-10 EDWARD VII., A. 1910

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Halifax, Province of Nova Scotia, for the Year 1908—Continued.

1	Number.		128470 5 F 8 9 5 11 2 2 4 4 5 5 F 8 2 5 2 5 2 5 3 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	TOTAL VALUE OF ALL FISH.	\$ cts.	14 489 00 24 850 50 19,296 52 19,296 52 19,20 00 12,120 00 12,120 00 12,120 00 13,333 00 19,639 00 2,949 00 2,949 00 2,949 00 2,949 00 2,949 00 2,949 00 2,949 00 3,949 00 2,949 00 3,949 00 3,940 0
	Seal skins, No.		O1401 H
	Fish as manure, brls.		1160 220 10 10 14 44 44 44 66 600 600
	Fish as bait, brls.		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	Fish oil, galls.		1400 11300 12000 2000 5300 530 630 630 630 630 630 630 630 630 630 6
	Coarse and mixed fish, brls.		000000000000000000000000000000000000000
	Squid, bris.		0.000 0.000
H.	Tom cod or frost fish,		300 200 200 1100 1100 1100 1000 1000 100
KINDS OF FISH.	Flounders, lb.		3000 1500 1500 1500 1500 1500 1500 1500
KINDS	Clams, brls.		30 30 30 34 44 44 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18
-	Oysters, brls.		
!	Eels, brls.		000 8 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	Alewives or Gaspe-		24 4 9 9 9 4 2 1 1 1 4 2 1 2 1 4 1 1 1 1 1 1 1 1 1
	Smelts, lb.		1000 1000 630 1100 650 590 1200)
	Trout, lb.		2000 1500 600 900 100 1100 1100 1100 1000 1000
	Halibut, lb.		100 80000 1000 1000 20000 12000 12000 12000 12000 180 180 180 1200 120
	Pollock, cwt.		100 100 100 100 100 100 100 100 100 100
	Number, Districts,	Halifax County.	North Shore   2 East St. Margarets   3 Indian Harbour. 4 Peggy's Cove. 5 Dover. 6 Dover. 7 Terrance Bay Sembro. 10 Ketch Harbour. 10 Ketch Harbour. 11 Portuguese Cove. 12 Herning Cove. 13 Ferguson's Cove. 14 Bedford and Grand Lake. 15 Halifax. 16 Darhmouth, Eastern Passage and Devil's Island. 17 Cow Bay and Lawrencetown 18 Seaforth and Threefathon. Harbour. 19 West Chezetcook. 22 Rest Chezetcook. 23 Fetheswick Harbour. 22 Musquodoboit Harbour. 23 Jeddore. 24 Clam Harbour and Owl's Head.
	Managana		อออออออ

2,211 00 25 4,029 00 26 8,559 00 27 15,915 70 28 29,100 25,29 7,686 50,30 18,930 60,31 22,827 25,32 578 00,33 21,208 10 34	585,582 70	
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244 1055 1055 11 11 11 11 105 105 105 105 1	2844	7110
25 West Ship Harbour. 26 East Ship Harbour and Tangier. 27 Pleasant Harbour and Tangier. 29 Pope's Harbour and Gerard's Island. 29 Spry Bay, Taylor Head and Mushaboue Harbour and Sober Island. 30 Sheet Harbour and Sober Island. 31 Beaver Harbour and Port Dufferin. 32 Quoddy and Harrigan Cove. 33 Moser River and Smith's Cove. 34 Mitchell Bay and Ecun Sceum.	Totals	Values

9-10 EDWARD VII., A. 1910

Return showing the Number, Tonnage and Value of Vessels, Boats, &c., in the County of Hants, Province of Nova Scotia, for the year 1908.

		Fish	iing B	OATS.		Fishin	G GEA	R OR	Мате	RIALS	3.	Fix	THER TURES ED IN HERIES.	
	Districts.		Boats.			Gill Nets.			Wiers.		Hand Lines.		noke Fish suses.	
Number.		Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.
	Hants County.		\$		-		\$		\$		\$		\$	
2 3	Noel to Shubenacadie Shubenacadie to Grand Lake Hantsport to Windsor Windsor to Noel	$ \begin{array}{r} 40 \\ 50 \\ 7 \\ 7 \\ \hline 104 \end{array} $	560 400 350 600 1910	50 50 10 10 10	80 15 7.	2550 800 1200 900 5450	360		60			 2 	150	

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Hants, Province of Nova Scotia, for the year 1908.

			Kını	s of F	ish.					
Districts.		Herring, salted, brls.	Cod, dried, cwt.	Trout, lb.	Shad, brls.	Alewives, or Gasperieau, brls.	Bass, 1b.	TOTAL VALUE C		Number.
Hants County.								\$	cts.	
1 Noel to Shubenacadie	4000 900 2000 800		20	400 800 1000 1500	15 20 10	120 110 45 10			1120 845 780 590	3
	7700			3700		285			3335	
	1155	90	90	370	450	1140	40		• • • • • •	

# RECAPITULATION.

Of the Yield and Value of the Fisheries in District No. 2, Province of Nova Scotia during 1908.

intity.	Kinds of Fish. Quan	Rate.	Totals.	
008.	. 190	s ets.	\$	cts.
248,873 1,300 12,001 12,001 24,800 92,700 92,700 754,800 92,700 775,285 24,184 26,388 7,496 47,347 10,542 286,700 7,637 3,916 12,205 343,400 92,761 152,150 40,440 40,440 1,434 2,300 99,761 152,150 40,400 1,434 2,300 99,761 152,150 40,400 1,434 1,542 1,540 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,540 1,434 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,542 1,540 1,542 1,542 1,542 1,542 1,540 1,542 1,542 1,542 1,542 1,542 1,542 1,540 1,542 1,5		0 15 0 15 0 15 0 15 0 01 0 02 0 12 15 00 0 30 7 00 0 30 0 4 50 10 00 0 25 2 50 0 10 10 00 0 07 4 00 0 0 10 10 00 0 0 7 4 00 0 0 3 0 0 10 0	9,970 4,566 4,564 1,213 30,116 4,842 15,859 18,415 21,495	00 15 50 00 00 20 00 40 00 50 00 50 00 50 00 00 50 00 00 50 00 0
5: 1: 4:	n cod	0,440 7,529 2,421 2,865 2,277 2,991 110	$\begin{array}{c cccc} 0,440 & 0 & 03 \\ 7,529 & 4 & 00 \\ 2,421 & 2 & 00 \\ 2,865 & 0 & 30 \\ 2,277 & 1 & 50 \\ 2,991 & 0 & 50 \\ 110 & 1 & 25 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

# RECAPITULATION.

Showing the number and Value of Fishing Vessels, Boats, &c., in District No. 2, Province of Nova Scotia, for the Year 1908.

Articles.	Value.	Total.
	\$ ets.	\$ ets.
128 vessels (2,585 tons)	91,425 00 172,835 00	964 960 00
47,892 gill nets (1,054,672 fathoms). 441 seines (47,837 fathoms). 159 trapnets 5,529 trawls 21 weirs 441 smelt nets.	323,488 00 145,375 00 46,820 00 40,268 00 1,720 00 6,420 00	264,260 00
13,800 hand lines	8,735 00 107,500 00 217,796 00	572,826 00
57 freezers and ice-houses. 1,894 smoke and fish-houses. 905 piers and wharfs. 39 tugs and smacks.	162,985 00 213,263 00 205,233 00 52,950 00	325,296 00 634,431 00
Total		1,796,813 00
Number of men in vessels		No. 722 5,634 1,246
Total		7,602

NOVA SCOTIA—Continued.

DISTRICT No. 3

# FISHERIES STATISTICS

COUNTIES OF LUNENBURG, QUEENS, SHELBURNE, YARMOUTH, DIGBY, ANNAPOLIS AND KINGS.

9-10 EDWARD VII., A. 1910 Return showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c.,

		F	ISHIN	G VES	SELS	AND	Волт	s.						Fishin	G G	EAR OR
			V	essels.			Boats			Gill <b>N</b> e	ets.		Seine	es.	Tra	Nets.
Number.	DISTRICTS.	Number.	Tonnage.	Value.	Total Fisher- men.	Number.	Value.	Men.	Number.	Fathoins.	Value.	Number.	Fathoms.	Value.	Number.	Value.
	Lunenburg County.			\$			\$				\$			\$		\$
2	Fcx Point Mill Cove Lodge and N. W.					125 200					1700 2000			6000 4000		2000 2000
4	Cove					75 40					1300 200		1500 800	2800 1200	8 4	1500 700
	Cove Chester Bay Mahone Bay and	2	32				3750 2500				$750 \\ 2400$		1600 900	$\frac{1250}{2500}$	11 9	830 1800
	Martin River Little and Big	18	1500	63000	300	200	2500	240	200	12000	2800	12	900	2300	5	1000
	Tancook Lunenburg Har. to					400	9000	420	40	6000	2000	45	4000	2600	20	2100
	Kingsburg La Have River Petite rivière to			302340 247520			15350 12605		$1550 \\ 1450$	31000 29000	15500 14500	6 8	600 800	1200 1600	50 8	12000 1800
	Port Medway	1	61	4270	10	132	5150	136	900	18000	9000	2	200	400	2	500
	Totals	122	9447	618630	1826	1907	58455	2050	4460	119200	52150	164	14900	2.850	138	26230

SESSIONAL PAPER No. 22 in the County of Lunenburg, Province of Nova Scotia, for the Year 1908.

MATI	ERIALS.						Lobs	TER F	LAN'	г.	C	THER ]	Fixtu	URES US	SED I	n Fisi	ERIE	is.	Whole	
Tra	wls.		nelt ets.	Ha Lin			an-	Traj	ps.	oyed in	aı	reezers nd Ice ouses.	F	te and ish	a		Tu Stear & Sn	mers	Fishing Gear.	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons Employed Canneries.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Number.
	\$		\$		\$		\$		\$			\$	}	\$		\$		\$	. \$	,
10 10	70 70			150 20	75 20			500 500	120 200		١.		···i0	400	$\frac{7}{10}$	300 300			12665 11990	
9	85 30			70 40	70 40	i	750	300 1000		25			10 6	400 300	15 8	750 400		200	8445 5120	
4	40 25		20	125 10	128 8		1200	950 3500			3	800	18 10	900 400	22 6	1100 1000		450	106 <b>7</b> 3 14303	
50	400	4	40	200	150			500	120				20	920	25	4200			77430	7
44	392			210	210			2400	1200				37	1850	37	1850			21202	8
550 430	22000 17200			2500 3000	1250 1500	3			2100 2400		2	600	200 170	15000 9000	140 75	40000 <b>22</b> 500		900 <b>400</b> 0		
		3	120	750	375			1500	900				35	3500	30	15000		,	39215	11
1114	40312	9	180	7075	3826	7	2750	18650	9305	128	5	1400	516	32670	375	87400	13	5550	964708	5

9-10 EDWARD VII., A. 1910
Return showing the kinds and quantities of Fish and Fish Products in the

						:	Kind	of Fish.					
Number.	Districts.	Salmon, fresh, lb.	Salmon, salted or smoked. lb.	Herring, salted, brls.	Herring, fresh, lb.	Mackerel, fresh, lb.	Mackerel, salted, brls.	Lobsters, preserved in cans, lb.	Lobsters, fresh in Shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lb.	Haddock, dried, cwt.
	Lunenburg County.												
2	Fox Point	140 100		100 50					200 200			250 500	
4	Cove	90		30 25					180 2			700 200	
6	and Deep Cove Chester Bay Mahome Bay and	200 1500		710 800					250		4	600 1000	
i	Martin River Little and Big Tan-	3000	150	300	50υ	2000		] 	5	20000	25	3000	2000
j	cook Lunenburg Har. to	500		4000	800	750	95		37	155		900	300
10	Kingsburg	7600	500		12000 100 <b>0</b> 0	10000 4500	459 301	58800 14976		74046 65286	59 40		13554 144
	Port Medway	8545	:	1270	2000	300	64		95	1500	5	1500	49
	Totals	21675	1150	11305	29200	22475	1124	139776	1123	161791	135	22150	16405
	Values	3251 25	230	50872 50	292	2697	16860	41932 80	11230	728059 50	1350	664 50	49215

SESSIONAL PAPER No. 22

County of Lunenburg, Province of Nova Scotia, for the year 1908.

-					-														=
							Kı	ND (	OF	Fish.	_						Fish.		
Haddock, smoked finnan haddies, 1b.	Hake, dried, cwt.	Hake, sounds, 1b.	Pollock, cwt.	Halibut, lb.	Trout, 1b.	Smelts, 1b.	Alewives or Gas- pereau, brls.	Eels, brls.	Clams, brls.	Flounders, 1b.	Tom cod or frost fish,	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	TOTAL VALUE OF ALL FISH.	The second secon	Number.
				17				[.									\$ c	ts.	
	100 25		10 18	500 200			····8	$\frac{2}{2}$		4000 30000	1500 1500		$\frac{240}{240}$	40 40	250 200		5778 5719	50 50	$\frac{1}{2}$
	$\frac{24}{7}$		22 5	700						19000 12000	2300 2000		110 70	30 10	130 70		5000 8944		3 4
500	24 12	300	29 10	400 500	60 400	400	40	4	ii	48000 30000	1200 800		250 200	35	325 300	7	7010 22635		5
600	10	200	180	15000	<b>2</b> 50	800	12	6	3	10000	<b>30</b> 00		250	400	500		102457	00	7
	35		38	2500						73000	700		1000	140	1100	160	28008	00	8
• • • •	3440 7		1778 153	$\begin{array}{c} 141700 \\ 2970 \end{array}$		3000		15 30			2000 2500	200 110		58114 48964			457419 330347	20 00	9 10
			46			2500		10						1100			16599	75	11
1100	3684	500	2289	164470	870	6700	70	71	13	226000	17500	310	2360	108873	2875	167			
66	9210	125	5722 50	16447	87	268	280	710	26	6780	525	1240	4720	32661 90	4312 50	83 50	989918	95	

9-10 EDWARD VII., A. 1910

Return showing the Number, Tonnage and Value of Vessels and Boats and the Quan in the County of Queens, Province of

			Fish	ING VI	ESSEL	S AN	D Boa'	TS.								Fish	ING	GEAR
	Dyamayam		V	essels.			Boats.			Gill Ne	ets.		Sein	es.		rap ets.	Т	rawls.
Number.	Districts,	Number.	Tonnage.	Value.	Total Fisher- men.	Number.	Value.	Men.	Number.	Fathons.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.
	Queens County.			\$			\$				\$			\$.		\$		\$
1	Port Medway					145	3500	290	430	8620	- 3500	5	265	150	1	400	14	120
	Mill Village and Greenfield					79	825	100		900	300							
	Liverpool, Brook- lyn and Western HeadGull Islands, Sum- merville and Whiteand Hunts	• •	• • •			80	1600	110	220	35600	700	9	990	2250	9	4000		
5 1	Points					30	450	50	75	1250	220				2	1000		
6]	Port Mouton and vicinity Port Joli & Hebert Beach Meadow to Berlin including	2		400	9	48 69	800 1100	70 40	175 150		510 550		240 200					
	Kempt					60	1200	<b>6</b> 5	250	4500	750	3	330	600				
	Totals	2	27	400	9	511	9475	715	1360	56470	6530	$\frac{-}{22}$	2025	3450	12	${5400}$	14	120

tity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry Nova Scotia, for the Year 1908.

or M	IATEI	RIALS	5.		Lobs	STER P	LANT.			Отн	ER F	IXTURE	s usi	ED IN	Fı	SHERIE	s.	WHOLE FISHING GEAR.	
Sme Ne		Ha Lin			anne- ries.	Tra	ps.	red in	ar	reezers nd Ice ouses.	and	rish uses.	ar	ers ad arfs.	Ste	lugs, eamers Sm'cks	Imple-	WHOLE	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons employed Canneries.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Other Fishing ments.	Value.	Number.
	8		\$		\$		\$			\$		\$		\$		\$		\$	
135	675	375	187			4900	4900	, [	2	220	60	1500	24	750			850	16752	1
									16	425	60	600	50	420				2570	2
3	60	250	125	1	2000	3500	3500	20	3	1600	70	3000	4	2000	4	2500		23335	3
		225	63			3000	3000				20	800	2	700	1	600		6833	4
		200 125	100 63		3500 100	4000 3600	4000 3600	30			40 25	5000 800	10 4	3500 1200		24000		42010 7663	
		225	113			3600	3600				35	1800	2	400				8463	7
138	735	${1400}$	651	6	5600	22600	22600	51	21	2245	310	13500	96	8970	13	27100	850	107626	The same of the sa

\$9-10 EDWARD VII., A. 1910 Return showing the kinds and quantities of Fish and Fish Products in the

						]	Kinps	ог Г	ish.					
Number.	Districts.	Salmon, fresh, 1b.	Salmon, salted or smoked, lb.	Herring, salted, brls.	Herring, fresh, lb.	Herring, smoked, lb.	Mackerel, fresh, lb.	Mackerel, salted, brls.	Lobsters, preserved in cans, lb.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, Tongues and Sounds, brls.	Haddock, fresh, lb.	Haddock, dried, cwt.
	Queen's County.													
1 2	Port Medway Mill Village and Green	10500	225	250	600		14200	25		850	800		1200	120
	field	12218	300											• • • •
	Western Head Gull Islands, Summer-	1000	250	1200	3000	1500	200000	60		33	2000	5	4500	350
5	ville, White and Hunts Points			300			3000	30		60	1200		500	118
6	Ports Joli and Hébert			2000 600			2000	25	105600	$\frac{1700}{250}$	1100 360		600	100 65
7	Beach Meadows and Berlin	600		125					35400	500	650	.2	600	300
	Totals	24318	775	4475	3600	1500	219200	140	141000	3393	6110	7	7400	1053
	Values	3647 · 70	155	20137 · 50	36	30	26304	2100	42300	33930	27495	70	222	3159

SESSIONAL PAPER No. 22 County of Queen's, Province of Nova Scotia, for the Year 1908.

				Kin	DS O	f Fi	SH.							
Pollock, cwt.	Halibut, lb.	Trout, lb.	Smelts, lb.	Alewives or Gaspereau, brls.	Eels, brls.	Clams, brls.	Flounders, 1b.	rls.	Coarse and Mixed Fish, brls.	Fish oil, galls.	Fish as bait, brls.	Seal skins, No.	TOTAL VALUE OF ALL FISH.	Number.
													\$ cts	š.
340	600		12475	30 <sub> </sub>	45					100	400	30	19,972 5	0 1
		4900		190	19								3,332 7	0 2
250	800	300					1000	20	25	100	700			3
175	1000	150				. <b></b>	1200	10	15	50	40		43,100 (	00 4
100 25	2000 250	300		···i0	8	20	1800 2000	5 6	10 12	125 100			9,262 8 68,684 8	50 5 50 6
25	400	200					1500	5	10	140	120		10,690	50 7
915	<b>5</b> 050	5850	12475	230	72	20	7500	46	72	615	6460	30	20,565	00
2287 50	505	585	499	920	720	40	225	184	144	184.20	9690	37.50	175,607	70

9-10 EDWARD VII., A. 1910 RETURN showing the Number, Tonnage and Value of Vessels, Boats, &c.,

			Fishing	VESS	ELS	AND	Воат	s.								Fish	ING (	GEAR
	Districts.		Vess	sels.			Boats			Gill Ne	ets.		Seir	nes.	I N	Trap lets.	Tra	wls.
Number.		Number.	Tonnage.	Value.	To'l fish'men	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.
	Shelburne County.			\$			\$				\$			\$		\$		\$
2	Lockeport Jordan Shelburne & Sandy	1 3	327·78 32·60			173 53						2		1000	1	$\begin{bmatrix} 2000 \\ 300 \end{bmatrix}$		1000 200
	Pt	9	45.67	25450	91	32	900	56	500	15000	2500	1		250			75	375
5	Birchtown Roseway Mc Nutts	1	11.08	300	3	35	800	50	150	4500	750			0 3 6			30	150
1	Is. and Carleton. Black Point, Red Head and Round		10.11	400	2	35	1800	63	250	7500	1250						60	300
7	BayPort Saxon, N.W.	2	32.39	1200	7	24	9 0	43	500	15000	2500						40	200
	& N.E. Harbors. Cape Negro Island	5	55.37	2100	21	6	200	15	150	4500	750						17	85
9	and Port Clyde Port La Tour and	5	53.00	1750	18	90	3000	90	850	17000	5950	٠.					46	276
11	Baccaro Barrington Cape Island Shag Harbor and	9	244 · 00 202 · 00 762 · 00	8000 7500 25000	39	300 65 350	9000 1950 17500	65	$1000 \\ 300 \\ 1200$	6000	6000 1800 7200			••••		2000 1500	$150 \\ 20 \\ 4000$	120
	Bear Pt Woods Harbor		103·00 167·00	3150 4900		$\begin{array}{c} 63 \\ 150 \end{array}$	$\frac{2000}{7000}$	83 180	600 600		3600 3500	i	100	500			$\frac{10}{20}$	50 100
-		155	24.38	99800	698	1376	49550	1731	6800	161500	39800	4	100	1750	8	5800	1108	5756

SESSIONAL PAPER No. 22 in the County of **Shelburne**, Province of **Nova Scotia**, for the Year 1908.

R	Мат	ERIA	LS.		Lobs	STER P	LANT.			Отн	er F	IXTURE	s usi	ED IN	F	SHERI	ES.		WHOLE	
	nelt ets.	Ha Lir			anne- ries.	Traj	)s.	loyed in	Free and Hou	Ice	and	oke Fish uses.		ers nd arves.	Ste	ugs, eam's	M	ories otors oats.	FISHING GEAR.	
IN MILIDEL.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons Employed	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Number.
	\$		\$		\$		\$			\$	}	\$		\$		\$		\$	\$	The state of the s
2		1000 300	1000 300	1	5000 100	7000 2500	7000 2500	60		1500	60 47	6000 940	35 35	5000 200	2	8000		1200 170	63,400 8,640	
		900	900			1500	1500		5	750	36	3500	19	6500				850	43,475	
1	15	150	150			2500	2500				40	900	23	1400				100	7,065	The second
		250	250			3500	3500				40	900	17	500				200	9,100	
		275	275			3500	3500		2	200	45	1000	10	2200				200	12,175	-
		175	175			2500	2500		1	100	16	400	11	1200				220	7,730	1
0	25	300	300	1	300	10000	10000	9			20	2000	20	1500				800	25,901	
		200	$1143 \\ 200 \\ 1500$		6000	12000 5000 25000	$\begin{array}{c} 12000 \\ 5000 \\ 25000 \end{array}$			1000	100 15 150	10000 2000 20000		5000 1000 15000		4000		4200 1750 12000	59,243 21,320 137,700	
		250 544				6000 12000	6000 12000				28 30	2800 3000	20 20	2000 2000		6000 6000		$1750 \\ 2400$		
3	190	6987		-		93000	93000	292	14	4550	627	53440	340	43500	30	24000		25840	472,793	-

9-10 EDWARD VII., A. 1910
Return showing the Kinds and Quantities of Fish and Fish Products in the

					F	CINDS	s of Fish					
Districts.	Salmon, fresh, lb.	Herring, salted, brls.	Herring, fresh, lb.	Herring, smoked, lb.	Mackerel, fresh, lb.	Mackerel, salted, brl.	Lobsters, preserved in cans, lb.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lb.	Haddock, dried; ewt.
Shelburne County.												
1 Lockeport	1000 3606	4500 3150	310000 600000			120 16	127200 624	2880 140				1500 175
dy Pt	1861	1250	9000	1500	500	32		100	6000	10	6000	325
Birchtown 5 Roseway McNutts	500	1600	165000	1200	250	10		200	240		1000	100
Island & Carleton Black Point Red Head and Round	4û	1750	3500	500	500	42	•••	<b>42</b> 5	300	1	500	300
Bay Port Saxon, N.W.		1460	1500	2000	500	40		575	380	1	500	275
& N.E. Harbors 8 Cape Negro Island	5670	1040	1000	1000	200	8		100	778	2	1000	150
and Port Clyde 9 Port La Tour and	5000	2500			2000	20	30392	400	3500	• • • •		1000
Baccaro	500	1000 109 3500	40000		1400		176712	608 192 13450				2336 350 2670
12 Shag Harbor and Bear Point 13 Woods Harbour		250 275		. 7	500 1000		94080 144000	1350 3456	1860		1920	540 836
Totals	18177	22384	1130000	8200	46350	288	573008	23876	67285	27	18420	10557
Values	2726 · 55	100728	11300	164	5562	4320	171902:40	238760	302782 50	270	552:60	31671

SESSIONAL PAPER No. 22 County of Shelburne, Province of Nova Scotia, for the Year 1908.

						Kinds	S OF	Fish	•									
Haddock, smoked finnan Haddies, lb.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lb.	Trout, lb.	Shad, brl.	Smelts, lb.	Alewives or Gaspereau, brl.	Eels, brls.	Clams, brls.	ders, lb.	od, o	Coarse and mixed fish, brls.	Squid, brls.	Fish oil, lb.	Fish as bait, brls.	TOTAL VALUE (ALL FIST	F	Number.
																\$ c	ts.	
500 300	150 10	3575 70	25000 900	1000 1000		600 2000		7 5		1200 1000	1000 700	32 2		2500 200	1000 125	144,806 25,973	50 60	1 2
		500	425	4000		200	15	10	200	1500	1200	12		4600	200	39,864	65	3
		130		300		100	15	5	3	800	500			75	. 75	13,188	00	1 4
,	1	200	300	-300		300	20	10	10	1000	500	12		200	100	16,194	50	5
		60	820	250		200	45	8	20	1000	400	15		200	100	16,442	00	6
	35	70	300	1000		3500	67	7	3	500	300			80	30	11,661	50	7
		2000	5000	4000	150	3750	50		50					100	1500	54,537	60	8
15000	40 66			1000			250		180 50 260		500		25	200 · 100 200	2000 2000 12000	87,948 15,996 387,443	50	10
1000		250 200	3000 2000	100 100			10	2	40 50					50 50	3000 6000	58,606 101,913		
16800	302	9330	255780	13050	150	10650	487	54	1041	7000	5100	73	25	8555	28130	974,576	55	
1008	755	23325	25578	1305	1500	426	1948	540	2082	210	155	146	100	2566.50	42195	974,576	55	

Return showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., the Fishing Industry in the County of Yarmouth,

	-	Fish	ING VI	ESSEL	S AN	в Волг	rs.						Fi	SHIN	G C	FEAR
Districts.		V	essels.	1	·	Boats.		(	Gill Ne	ts.		Trap Nets.	Tra	wls.	W	eirs.
Number.	Number.	Tonnage.	Value.	Total Fishermen.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Yarmouth County.  1 Port Maitland	3 3 20	57 35 780	\$ 1996 1410 25900	15 170	45 45 75	\$ 675 675 1125	90 90 150	160 300 535	3200 6000 10700	\$ 1600 3000 5350	2		25 25 200	375 375 3000		\$
4 Arcadia 5 Pinkney's Point and Comeau Hill. 6 Tusket Wedge. 7 Salmon River. 8 Tusket. 9 Eel Brook. 10 Argyle.	11 32 	15	15800	54 190	20 60 165 50 250 50 75	300 450 2925 750 1750 750 1125	100 150	470 $100$ $2100$ $150$ $300$	4500 9400 2000 42000 3000 6000	2250 4700 1000 21000 1500 3000			15 30  10 20	450	10	150 150 1500
Totals	16  90	$\frac{510}{1985}$	35330 88201	692	995	$\frac{2400}{12925}$	$\frac{320}{1675}$	475 4855	9500 97100	4750		16000			-	1800

RETURN showing the Kinds and Quantities of Fish and Fish Products in the

-	,											=
						Kinds of	Fish.			_		
Number.	District.	Salmon, fresh, lb.	Herring, fresh, lb.	Herring, smoked, lb.	Mackerel, fresh, lb.	Lobster, preserved in Cans, 1b.	Lobster, fresh, in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lb.	Haddock, smoked, finnan haddies, lb.	Hake, dried, cwt.
	Yarmouth County.											
2 3 4	Port Maitland Sandford Yarmouth Arcadia Pinkney's Point and	3500 5000 3000	84625 230375 312500 129250	400 500 900	40000 80000 12000	43200 147216 54432	33883	2601 1463 12033 950	16 18 35	106600	15006 12000 6000	25 20 300
6 7	Comeau Hill Tusket Wedge Salmon River Tusket	1200 4000 15500	273500 589125 1200	1000		33360 188208		1813 2940	8	70600 141800		20
10 11	Eel Brook	3000	2500 $142125$		9900	131520		618 18637	12 50			
	Totals	35200	1765200	2800	141900	597936	33883	41055	139	1314148	33000	365
	Values\$	5280	17652	56	17028	179380 80	*338830	123165	1390	39424 44	1980	365

<sup>\*</sup> About 40 per cent of these live lobsters pass through

SESSIONAL PÀPER No. 22

and the Quantity and Value of all Fishin; Materials and other Fixtures used in Province of Nova Scotia, for the Year 1908.

OR	MAT	FERIA	LS.		Lob	STER P	LANT.			OTI	HER I	FIXTUR	ES	USED I	n F	'isheri	ES.		Fishing	
	nelt ets.	Ha Lin	es.		Can- eries.	Tra	ps.	employed in	aı	eezers nd Ice louses.	and	roke Fish ouses.		Piers and Vharfs	St	Fugs, eamers Sm'cks		Iotor oats.	WHOLE GEAR.	and the state of t
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons emp	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value,	Number.	Value.	Value.	Number.
	\$		\$		\$		\$			\$		\$		\$'		\$		\$	\$	
••		900 600 800 175	450 300 400 88	1 3 1	1000 2800 300	1400 3675 17800 600	1490 3675 17800 600	73	1 12	500 200 7200 250	25 5 35	2500 750 7000	4 3 6 6	4000 1000 32000 3000	9	29000	15 10 40 5	7500 5000 20000 2500	25996 24385 155575 9138	2 3
15	300	225 800  100 775	113 400  50 388	1 5 	700 10800 	2355 9020  560 4790 6800	2355 9020  560 4790 6800	114	6 3 2 2 6	1500 600 450 500 6000	10 30  15  10 30	1000 3900 1500 1000 3000	2 3 3 3 4 9	3000 5000 3000 600 4000 6000	3 1	7000		5000 2500 5000	15858 66645 1750 35350 3860 17565 74368	6 7 8 9 10
15	300	4375	2189	14	19700	47000	47000	309	35	17200	160	20650	43	61600	13	42000	95	47500	430490	

County of Yarmouth, Province of Nova Scotia, for the Year 1908.

					F	ZIND	s of	Fisi	ſ.							2
Pollock, cwt.	Halibut, lb.	Trout, 1b.	Shad, Ib.	Smelts, lb.	Alewives or Gaspareau, lb.	Eels, brls.	Clams, brls.	Flounders, 1b.	Tom cod or frost fish, lb.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	TOTAL VALUE OF ALL FISH.	Number.
															\$ cts.	
2725 22 3115 145	5390 200 103510 2000	600 1200		1000 1000 20000 9000	10	30	50 50 60 60	3000	1200	15 15	1000 1400 250 5	2100 1400 3000 25	200 300 200	400 600 200	47,524 19 25,355 75 458,580 30 22,985 10	1 2 3 4
190 820  80 3405	1400 1100  5500	9000 20000 15000 13000 1000	80	1400 1000 1200 18000 2000 1300 18000	500 3000 500 90 25	24 5 50 80 100 20 12	70 70 25 75 50 100 125		5000 3000 20(0 2000 6000	15 50 	450	160 1500	27 160 100 500	125 120	21,599 50 80,037 65 4,338 08 19,977 00 4,742 50 5,916 00 117,430 75	
10502	119100	59800	80	73900	4125	321	735	3000	29200	170	3225	11685	1687	1445		
26255	11910	5980	800	<b>29</b> 56	16500	3210	1470	90	876	680	6450	3505 50	2530 50	722 50	808,486 74	

Yarmouth as shipments from other counties.  $22-7\frac{1}{2}$ 

9-10 EDWARD VII., A. 1910 RETURN showing the Number, Tonnage and Value of Vessels, Boats, &c.,

		Fishing	VES	SELS	AND	BOAT	S.		Fis	HING	G	EAR	or M	[ATE	RIALS.		
District.		Ves	sels.		-	Boats.		Gi	ll Net	s.	1	Seine	es.	Tra	wls.	W	iers.
Pastinot.	Number.	Tonnage.	Value.	Fotal, fisher- men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.
			\$			\$				\$			\$		\$		\$
Westport Freeport Tiverton and Central	9 10	179 323	5000 9300	60 95	147 115	13000 10000	285 118	285 118	5700 2360			600 250	2400 200	200 225	4000 4400		
Grove	3	86	5000	27	171	13000	147	143	<b>2</b> 860	715	3	250	550	187	3800		
4 Tidville and East Ferry	1	11.03	500	3	30	2600	$4\ddot{2}$	36	720	180				50	900		
5 Little River and Whale Cove 6 Sandy & Mill Coves 7 Centreville 8 Gullivers Cove to	2	29.50	1800	7	54 48 40		73 41 62	68 46 65	1360 920 1300	225		$   \begin{array}{r}     200 \\     1470 \\     50   \end{array} $	345 1700 50	102 47 80	2235 1500 2000	2	1000
Waterford 9 BayViewtoCulloden Digby and vicinity.		22·39 505	800 37000	5 125	44 36 142		57 55 48	51 55 55	1040 1100 1000	275	3	135 150 450		64 64 582	920 1200 11646	1	100 60 150
Smiths Cove and Brighton	٠.				23	1025	30	14	280	70	8	320	320	15	300	10	190
Plympton to Wey- mouth	1	17	600	3	40	2200	52	45	900	220				50	1000	1	5
Belleveau's Cove and vinicity	1	15	400	6	32	890	64	19	570	114				12	76	2	40
Comeauville and vicinity Meteghan & River	2	47	600	12	51 34	3755 1075	98 62	25 32								i	20
Cape St. Mary to County Line	10	156	3400	51	148	6310	246	126	3780	756				126	756	2	40
	50	1390 92	64400	394	1155	76846	1480	1183	25600	6117	45	3875	6765	1804	34727	25	705

SESSIONAL PAPER No. 22 in the County of Digby, Province of Nova Scotia, for the year 1908.

					Lobs	TER P	LANT			rO	HER	Fixtu	RES	USED :	IN .	Fishe	RIES.		WHOLE	
	nelt ets.	Ha Lin			nne-	Tra	ps.	loyed in	Free and Hou	Ice	Smand And Hou	Fish	Pic ar Wh	nd	Ste	ugs, eam'r	Car	itional s, and es, etc.	FISHING GEAR.	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons Employed Canneries.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Number.
	\$	_	\$		\$		\$			\$		\$		\$		\$		\$	\$	
		475 160	475 160	· i	300	2850 3120	2850 3120	5	5 1	500 350	24 20	3100 4600	35 21	11600 3900		600 725			44,975 37,645	
		335	335	2	1800	3800	3800	6	4	<b>35</b> 0	32	3075	16	20000	4	1150			53,575	3
		70	70			750	750		1	50	8	250	i	150	. ,				5,450	4
2	40	110 62 60	110 62 60	1 3 1	1500 3350 10000	1950 1570 2400	1950 1570 2400	10 50	4 4 3	1850	29 19 17	1790 1025 5000	8 4 2	1450 18100 3000	1	1000 300 4000			18,995 35,293 32,010	3 6
	60	66 77 208	66 77 208		1000	1688 1220 1500	1688 1220 1500	4	5 4 5		7 6 27	185 200 3500		6200 15000		156 2000			5,829 13, <b>07</b> 2 84,0 <b>2</b> 3	2 9
4	130	33	33			170	170		3	90	8	685	4	750					5,478	3 11
12	500	110	110			650	650		4	120	5	150	4	2550					8,150	12
		116	58			750	750				14	210							2,898	3 13
		110 108	55 54	$\frac{1}{2}$	300 700	$\frac{3250}{2640}$	$\frac{3250}{2640}$		1	30	41 26	760 800			i	800			8,300 7,061	
1	80	430	215	4	2200	8240	8240	45			46	1160	2	400	1	300		8650	32,867	7 16
21	810	2530	2148	16	21150	36548	36548	154	44	9790	329	26490	118	83100	17	11025		8650	395,616	6

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Digby, Province of Nova Scotia, for the Year 1908—Continued.

	Number.	128470278001121114111	
	Pollock, cwt.	19037 12835 6045 6045 896 896 896 1115 1115 1150 1115 843 1110 118 843 1110 118	45665 114162.50
	Hake, sounds, lb.	1800 12400 12400 10500 5550 1700 5000 5000 1700 5000	10336
	Hake, dried, cwt.	1500 3970 32409 1876 9100 6270 2977 11300 100 275	82108 205270
	Haddock, smoked		2431795
	Haddock, dried, cwt.	500 2744 470 470 1240 1175 50 1000 1000 1000 1000 1000	21389
	Haddock, fresh, lb.		1665350
Fish.	Cod, tongues and sounds, bris.	140 140 173 173 173 173 173 173 173 173 173 173	519
KINDS OF FISH.	Cod, dried, cwt.	7500 21774 7960 8960 8960 1183 1184 914 975 440 50 440 50 440 199 199	52574
-	Lobsters, fresh, in shell, cwt.	650 1080 1080 1080 1080 1080 1080 1080 10	8116
	Lobsters, preserved in cans, lb.	27264 10368 10388 36728	167584
	Mackerel, fresh, lb.	300 : : : : : : : : : : : : : : : : : :	700
	Herring, smoked, Ib.	15000	367672
	Herring, fresh, lb.	75000 75000 134400 57700 30000 421500 31000 22400 22400	1949000
	Herring, salted, brls.	50 200 200 100 100 337 700 300 300 300 140	830 2797 124·50 12586·50
	Salmon, fresh, lb.	250 100 100 100	830
	Districts.	Digby County.  Westport.  Preeport.  Tiverton and Central Grove. Tiverton and Central Grove. Title River and Whale Cove. Sandy and Mill Coves. Centreville. Gullivers Cove to Waterford. Bay View to Culloden. Digby and vicinity. Simils Gove and Brighton. Prympton to Weymouth. Beliveau's Cove and vicinity. Beliveau's Cove and vicinity. Comeauville and vinicity. Meteghan and River. Gape St. Marys to County Line.	Totals
	Number.	12284709090909111111111111111111111111111111	-

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Digby, Province of Nova Scotia, for the Year 1908—Continued.

	TOTAL VALUE OF ALL FISH.	& cts.	139,148 00 1 187,227 00 2 187,227 00 2 23,840 00 4 75,959 00 5 79,329 86 6 79,329 86 7 79,329 86 7 79,329 86 7 70,737 86 10 10,675 75 10 10,675 75 11 10,872 80 11 10,872 8		1,123,492 54
	Спек, 16.		500 500 600 320052 1500	323152	8078-80
	Fish as manure, brls.		6000 6700 6700 2500 4500 1320 1320 1320 1320 1600 1600 1600 1600	36045	18022.50
	Fish as bait, brls.		800 2700 2700 885 500 1000 775 165 690 690 1111	12292	18438
	Fish oil, galls.		4500 5000 11490 1200 4450 835 835 835 835 835 835 835 835 835 835	26934	8080.20
	Coarse and mixed fish, brls.		7000 48300 110250 11400 1265 600 1400 5000 6500 175	32940	65880
Fish.	Squid, brls.		205 205 100 100 125 125 125 125 125 125 125 125 125 125	1394	5576
KINDS OF FISH.	Tom cod or frost fish,		2000 3000 400 550 550 250 250 250 250 250 250 250 2	6325	189.75
X	Flounders, lb.		660 660 1000 600 600 900 900 1030 750 750 750 750	8005	240.15
	Clams, bris.		140 140 35 35 35 35 35 460 50 100 100 100 80 80 80 80 80 80 80 80 80 80 80 80 8	3120	6240
	Eels, brls.		2000	200	2000
	Smelts, lb.		200 600 800 1300 12500	15800	632
1	Trout, lb.		175 175 30 80 80 80 80 80 80 10 10 10 10 10 10 10 10 10 10 10 10 10	805	09.08
	Halibut, lb.		300000 45000 5100 735 735 736 736 737 737 737 737 737 737 737 737	271643	271643 30
	Number.	Digby County.	1 Westport 2 Freeport 3 Tiverton and Central Cove 4 Tidville and East Ferry 5 Little River and Whale Cove. 6 Sandy and Mill Coves 6 Central Cove to Waterford. 7 Central Cove to Waterford. 9 Bay View to Culloden. 10 Dicky and vicinity. 11 Smiths Cove and Brighton. 12 Plympton to Weymouth. 13 Belliveau's Cove and vicinity. 14 Comeauville and vicinity. 15 Meteghan and River. 16 Cape St. Marys to County Line.	Totals	Values

9-10 EDWARD VII., A. 1910

Return showing the Number, Tonnage and Value of Vessels and Boats and the Industry in the County of Annapolis, Province

			F1	SHING	VESSEL	S AND	Boats			F	ISHING
	Districts.		1	Vessels.			Boats		. 6	ill-Net	ts.
Number.	DISTRICTS.	Number.	Tonnage.	Value.	TotalFisher-	Number.	Value.	Men.	Number.	Fathoms.	Value.
	Annapolis County.			\$			\$				\$
2 3 4 5 6 7 8 9 10 11	Margaretsville Port George Port Lorne Hampton Phinney's Cove Parker's Cove Hillsburn Litchfield Port Wade Victoria Beach Clementsport Annapolis River and Basin, Lequille including Round Hill River.  Totals	2 1 10 2	26 13 284 63	625 500 8400 900	10 5  125 22 	20 24 37 16 31 46 30 35 8 60 6	9400 475 740 250 465 1220 950 1050 400 4000 240 5225 24415	20 29 70 15 52 78 35 46 16 88 6	67 59 126 40 104 92 65 69  20 12 100 —754	2760 295 2070 600 360 10000	590 1224 400 1040 920 650 690 200 120 5000

RETURN showing the Kinds and Quantities of Fish and Fish Products, in

					Kin	DS OF	Fish.				
Districts.	Salmon, fresh, lb.	Herring, salted, brls.	Herring, fresh, lb.	Herring, smoked, lb.	Mackerel, fresh, lb.	Lobster, fresh in shell, cwt.	Cod, dried, cwt.	Haddock, fresh, lb.	Haddock, dried, cwt.	Haddock, smoked, Finnan Haddies, lb.	Hake, dried, cwt.
4	202			-	A	7	0		<b>H</b>	H <sup>1</sup>	<u> </u>
Annapolis County.  1 Margaretsville 2 Port George. 3 Port Lorne 4 Hampton 5 Phinney's Cove. 6 Parker's Cove. 7 Hillsburn. 8 Litchfield. 9 Port Wade. 10 Victoria Beach. 11 Clementsport. 12 Annapolis River and Basin, Lequille including Round	450	300 875 300 500 1000 700 675	7500 3600 6000	3500 2000		35 188 1000 125 115 1900 170 1000 900	350 400 225 425 600 1600 300 1600	7500 5500 12000 2000 65000 5000 3000	400 350 375 375 500 2600 1500 1400 500 110		1750 2000
Hill River	18000		1300				15				
Totals	44450	4625	104600	9000	<b>20</b> 00	5533	6965	819500	9110	32620	30150
Values\$	6667 50	20812 50	1046	180	240	55330	31342 50	21585	27330	1957 20	75375

Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing of Nova Scotia, for the Year 1908.

GĒAI	R OR	Мат	ERIA	LS.		L	OBSTI	ER PLA	NT.	Отне	R FIXT	ures us	ED IN I	Fishi	ERIES.	337	
Tra	wls.	We	irs.	Han Lin		Cra	tes.	Tra	ps.	Free an Ice H	d	Smo ar Fish H	ıd	a	riers and narfs.	WHOLE FISHING GEAR.	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Value,	Number.
	\$		\$		\$	,	\$		\$		\$		\$		\$	\$	
264 20 10	500 125 120 620 920 650 460 2500 1320 100	3 4	200 250 600 400 700	176 12		1400		150 675 700 375 2200 4000 1400 1100 250 2100	150 150 700 375 2200 4000 1400 250 2100		100 500 75 200  250 100  200	18 24 10 23 35 16 23 18 88 6	500 416 870 610 700 1000 320 1150 900 4400 300	 8 1	3000 2000 2000	4444 3924 2708 5329 10323 7670 4496 16375 15096 3172	00 12

the County of Annapolis, Province of Nova Scotia, for the Year 1908.

						Kı	NDS	of F	'ish.						ALL FISH.		=
Hake, Sounds, 1b.	Pollock, cwt.	Halibut, lb.	Trout, lb.	Shad, brls.	Alewives or Gaspereau, brls.	Bass, lb.	Eels, brls.	Clams, brls.	Flounders, 1b.	Tom Cod or Frost Fish, lb.	Squid, brls.	Fish Oil, gall.	Fish as Bait, brls.	Fish as Manure.	TOTAL VALUE OF ALL		Number.
															\$ c	ts.	
250 275 250 225 1150 1400 1050 5000 9800 205	500) 500 350 475 375 450 500 400 350 6000 110	1100 2000 1000 300 1100 5500 600 1150 5000 6500			3 8 5 5 5 2 4 5  15		2	600	1200 5000 1600 1700 1600 2200 1700 1500 3000 1200 650	5000 7500 9000 6500 7000 2500 5500 5000 2500 1500	8 15 20 7 12 20 6 7 18 60 8	125 125 135 125 345 400 400 300 1500 2200 60	120 475 460 175 950 1200 800 950 1300 8000 85	450 650 350 1750 1500 1200 1000 7000 9000 400	8532 13343 20449 8230 15493 47574 31439 17113 53092 99731 4883	25 50 25 00 00 20 00 00 25	11
			6500	115		750	5		750	700	22			30			12
20805	10010	28650	6500	115	52	750	7	3105	22100	53700	203	5715	14515	23680	324732	95	_
5201 25	25025	2865	650	1150	208	75	70	6210	663	1611	812	1714 50	21772 50	11840	324732	95	

9-10 EDWARD VII., A. 1910

Return showing the Number, Tonnage and Value of Vessels and Boats and the quan in the County of Kings, Province

		F	ISHIN	ıg Vı	ESSEL	S AN	р Вод	ATS.					Fis	HING
	Districts.		Ve	essels	•	]	Boats	•	Gi	ill-ne	ts.		Sein	es.
Number.		Number.	Tonnage.	Value.	Total fisher- men.	N'umber.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.
	Kings County.			\$			\$				\$			\$
2 3 4 5 6 7 8 9 10 11 12	Morden and Vicinity Victoria Harbour and Ogilvie Wharf. Harbourville Canada Creek. Chipman's Brook and Hunting Point Hall's Harbour Race Point and Sheffield Vault Baxter's Harbour. Whalen Beach and Well's Cove Scott's Bay. Blomidon and Kingsport Starr's Point to Welfville Avonport to County Line and Inland Waters.	1 1 1 2	20 25 14 38	350 275 150 350	3 2 6	12 14 27 5 25 5	135 225 200 235 525 65 500 60 1310 170	32 12 6 20 14 45 8 35 10 24 16 4	10 11 14 14 37  45 10 30 5	445 500 250 410 800  1200 100 450	150 300 100 150 325  350 125 230 125	2 3 3 2 2 2 2 2 2 2 2 2 1	300 450 450 350 300 300 350 3500	200 300 300 225 200 200 200 300 1300 152 800
	Totals	8	187	2025	23	156	3965	234	197	5655	2430	30	9950	4877

# RETURN showing the kinds and quantities of Fish and Fish Products in

	1								
				KINDS	s of	Fish	[,		
Districts.	Salmon, fresh, lb.	Herring, salted, brls.	Herring, fresh, lb.	Herring, smoked, 1b.	Mackerel, fresh, lb.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, Tongues and Sounds, brls.	Haddock, fresh, lb.
Kings County.									
1 Morden and vicinity 2 Victoria Harbour and Ogilvie Wharf 3 Harbourville 4 Canada Creek 5 Chipman's Brook and Hunting Point 6 Hall's Harbour 7 Race Point and Sheffield Vault 8 Baxter's Harbour 9 Whalen Beach and Well's Cove 10 Scott's Bay 11 Blomidon and Kingsport 12 Starr's Point to Wolfville 13 Avonport to County Line and Inland Waters.	2700	30 10 100 25 75 10 25 14 75	11500 22000 15000 15000 21000 20000 18000 7500 13000 11200 700	8000 2000	100 150 550 450 1000 1100 200 1000 500	78 55 75 110 100 30 2 54 95 	240 55 25 222 83 289 65 211 16 380 80 15	3	1800 1100 1000 7700 6000 41500 1700 2500 25400 6150
Totals	92100	434	169900	16000	6300	679	1681	3	96850
Values	13815	1953	1699	320	756	6790	7564.50	30	2905.50

SESSIONAL PAPER No. 22

tity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry of Nova Scotia, for the year 1908.

FEAR	or I	MA:	TERIAL!	S.		Lobs	TER PLA	ANT.		OTHER	Fixtu	res Us	ED IN	FISHERI	ES.		WHOLE
Trav	vls.	w	eirs.	Han		Tr	aps.	Employed.	and	ezers l Ice ises.	Smo and H Hous	ish	Pie: W	rs and harfs.	Squ Ne		FISHING GEAR.
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons Emp	Number.	Value,	Number.	Value.	Number.	Value.	Number.	Value.	Value.
	\$		\$		\$		\$			\$		\$		\$		\$	\$
6 10 35 25 4 6		4 2 2	1000 1250 1850 1250 1000 500 500 1000 950 1500 400 200	100 22 25 50 32 150 18 100 16 100 25 8	100 22 25 50 32 150 18 100 16 100 25 8	160 200 300 300 150 150 25 200 200	100 160 200 300 300 150 25 200 200	2 3 2 8 4 4 3 1 4 8	4 2 3 1 2 4 2 4 2 1	100 50 75 25 50 160 50 100 50 25	10 4 4 5 7 6 3 6 2 2 20 3 1	200 125 100 125 175 300 175 300 40 500 125 50	-6	11500	17	120	2250 2092 3425 2710 2467 3085 1158 2900 1816 5256 1897 1098
86	1151	47	11400	646	6 <b>4</b> f	1785	1785	39	25	685	73	<b>2</b> 395	6	11500	17	120	42979

the County of Kings, Province of Nova Scotia for the year 1908.

	J				Kin	DS OF	Fish.							
Haddock, dried, cwt. Haddock, smoked Finnan Haddies, 1b.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lb.	Trout, lb.	Shad, brls.	Smelts, lb.	Alewives or Gaspereau, brls.	Bass, lbs.	Clams, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	TOTAL VALUE OF ALL FISH.	Number.
5 131 300 7 51	20 10 5 26 50 127  43 5 5	320 10 15 35 70 50 37 47 19 51 25	150 1250 100 200 100 1500 900	3000	1 2	10000	100 7 20 144 25 13 4 6 5 10 15	125 100 450 625 500 400 200 350 500 250 100	1100	25 20 125  50	375 225 300 300 450 550 250 300 180 800 100	300 200 450 650 750 4500 2000 2000 1200 4000 1300 25	4,016 50 214 50	1 2 3 4 4 5 6 6 7 8 9 9 10 11 12 11
	20	2		5000	13		1176	50		,		20	6,599 00	13
239 300	375	693	5800	8000	26	10000	1305	3650	1100	275	3830	15895		-
717 18	937 · 50	1732:50	580	800	260	400	5220	365	2200	82.50	5745	7947 50	62,838 00	

# RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 3, Nova Scotia, for the Year 1908.

Kinds of Fish.		Quantities.	Rate.	Value.	Total Value
				\$ cts.	\$ cts.
Salmon freshsmoked.	lb.	236,750 1,925	15 20	35,512 50 385 00	
Herring pickled " fresh " smoked	brls. lb.	46,020 5,151,500 405,172	4 50 01 02	207,090 00 51,515 00 8,103 44	35,897 50
Mackerel fresh	brls.	438,925 1,552	12 15 00	52,671 00 23,280 00	266,708 4
Lobsters preserved in cans	lb. ewt.	1,619,304 76,603	30 10 00	485,791 20 766,030 00	75,951 00
Cod dried	brls.	296,406 41,055 830	4 50 3 00 10 00	1,333,827 00 123,165 00 8,300 00	1,251,821 20
Haddock fresh	lb. ewt. lb.	3,943,818 44,493 2,515,615	03 3 00 06	118,314 54 133,479 00 150,936 90	1,465,292 00
Hake freshdriedsounds	ewt.	365 116,619 62,649	1 00 2 50 25	365 00 291,547 50 15,662 25	402,730 44
Cusk Pollock Halibut Frout Shad Alewives	ewt. lb. brls.	323,152 79,404 850,493 94,875 371	$\begin{array}{c} 02\frac{1}{2} \\ 2 & 50 \\ 10 \\ 10 \\ 10 & 00 \end{array}$		307,574 75 8,078 80 198,510 00 85,049 30 9,487 50 3,710 00
melts aass. Cels Jlams	lb. brls.	$\begin{bmatrix} 6,269 \\ 129,525 \\ 4,400 \\ 1,025 \\ 9,134 \end{bmatrix}$	4 00 04 10 10 00 2 00	•••••	25,076 00 5,181 00 440 00 10,250 00
quid Flounders Com cod or frost fish. Lixed fish	lb.	2,148 273,605 111,825	4 00 03 03	• • • • • • • • • • • • • • • • • • • •	18,268 00 8,592 00 8,208 15 3,354 75
u as bait	galls. brls.	$   \begin{array}{r}     38,670 \\     162,652 \\     69,789 \\     77,232   \end{array} $	2 00 30 1 50 50		77,340 00 48,795 60 104,683 50 38,616 00
Total for 1908	No.	30	1 25		4,459,653 43
1907					4,530,699 45 71,046 02

# RECAPITULATION

Of the Number and Value of Fishing Vessels, Boats, Nets, &c., in District No. 3, Nova Scotia, for the Year 1908.

No.	Articles.	Value.	Totals.
		\$	00
443 6,653	Fishing vessels (15,891 tons) boats.	884,681 308,971	1 100 000
19,609 265 162 5,900 113 196 24,199	Gill nets (493,490 fathoms). Seines (30,750 fathoms). Trap nets Trawls Weirs Smelt nets. Hand lines.	167,081 42,692 53,430 94,366 25,300 2,145 17,514	1,193,652
58 2 <b>32</b> ,893	Lobster canneries	68,100 223,548	402,52
2,287 993 86	Freezers and ice-houses Smoke and fish-houses Fishing piers and wharfs tugs and smacks	37,295 160,311 307,070 109,675	291,64
	Additionnal equipment, cars, crates, &c		614,35 10,66
	Totals.		2,512,83

# STATEMENT of men employed, 1908.

Number of	men fishing	in vessels		 	 	
		boats				
Persons em	ployed in lo	bster cannerie	s	 	 	 . 973
	Total	number of per	sons	 	 	 13,267

# RECAPITULATION

Of the Fisheries of the whole of Nova Scotia, for the Year 1908.

Kinds of Fish.		Quantities.	Value.	Total Value
			\$ cts.	\$ cts
Salmom, fresh	1b.	650,225 4,300 17,126	97,532 45 645 00 2,825 15	
Herring, pickled  fresh.  smoked and kippered.	brls. lb.	118,839 6,663,602 1,197,872	834,774 50 66,636 00 23,957 44	101,002 60
Mackerel, fresh pickled	brls.	2,581,740 56,216	297,808 20 843,240 00	625,367 94
Lobsters, preserved in cans.	lb. ewt.	4,399,610 -87,321	1,319,882 60 834,612 00	1,141,048 20
Cod, dried	brls.	402,375 41,055 1,075	1,810,686 50 123,165 00 10,750 00	2,154,494 60
Haddock, fresh	lb. ewt. lb.	6,968,904 78,830 3,073,015	209,065 94 236,490 00 184,360 90	1,944,601 50
Hake, dried	ewt.	126,322 67,117	316,111 00 16,758 25	629,916 84
Pollock, dried	cwt.	82,636 1,332,038 169,950		332,869 25 261,601 80 133,203 30 16,994 50
Shad Alewives Smelts. Bass.	brls.	598 9,172 659,185 6,700	• • • • • • • • • • • • • • • • • • • •	5,980 00 36,688 00 36,047 20 670 00
Eels Clams Oysters	brls.	4,076 27,236 1,515		40,760 00 54,572 00 9,090 00
Squid. Flounders. Tom cod or frost fish. Mixed fish	lb. brls.	21,747 723,414 215,391 43,583		86,984 00 21,701 65 6,460 95 87,166 00
Fish oil.  as bait.  se as fertilizer.  seal skins.	galls. brls.	249,673 96,922 124,323		74,901 10 145,383 00 62,161 50 172 50
Total for 1908				8,009,8 <b>3</b> 8 98 7,632,330 61
Increase				377,508 32

# RECAPITULATION

Of Vessels, Boats, Nets and Fishing Material, and of the capital invested in the whole of Nova Scotia, for the Year 1908.

Number.	Description.	Value.	Total Value.
		\$	\$
679 15,442	Fishing vessels (20,503 tons) boats	1,028,976 570,612	1 500 500
$\begin{array}{c} 82,649 \\ 729 \\ 344 \\ 14,596 \\ 164 \\ 850 \\ 50,322 \\ 2 \end{array}$	Gill nets (1,874,359 fathoms). Seines. Trap nets. Trawls, (long lines). Weirs. Smelt nets Hand lines Otter trawls.	609,406 188,687 115,656 160,061 27,620 9,972 37,592 1,000	1,599,588
215 705,960	Lobster canneries, &ctraps	222,900 543,486	1,149,994
269 5,687 2,293 190	Freezers and ice-houses Smoke and fish-houses Piers and wharfs Tugs and smacks. Steam trawlers.	231,330 490,002 628,878 179,970 15,000	766,386
	Total		5,062,148

# STATEMENT of number of men employed, 1908.

Number of men	fishing in vessels		5,074
tt.	boats	1	9,447
Persons employe	ed in lobster canneries, &c		3,706
Т	otal number of persons		8,227

# APPENDIX No. 4,

# NEW BRUNSWICK.

District No. 1, comprising the counties of Charlotte and St. John. Inspector John F. Calder, Campobello.

District No. 2, comprising the counties of Albert, Westmoreland, Kent, Northumberland, Gloucester and Restigouche. Inspector R. A. Chapman, Moncton.

District No. 3, comprising the counties of Kings, Queens, Sunbury, York, Carleton and Victoria. Inspector H. E. Harrison, Fredericton.

REPORTS OF THE FISHERY OFFICERS OF THE PROVINCE OF NEW BRUNSWICK, FOR THE SEASON 1908.

# DISTRICT No. 1,

COMPRISING THE COUNTIES OF CHARLOTTE AND ST. JOHN.

CAMPOBELLO, 1909,

To the Superintendent of Fisheries, Ottawa.

SIR,—I have the honour to submit herewith my third annual report on the fisheries of District No. 1, New Brunswick, for the fiscal year ending March 31st, 1909, with the statistics of the different sub-divisions.

I regret to report a decrease in the value of the catch as compared with that of last year of \$179,808.60. The value of the catch for 1907–8 was \$1,554,601. The value of this year's catch is \$1,374,792.40. While the value of the yield for this year is 11 per cent less than the previous year, yet it is slightly greater than the value of the catch for 1906. The decrease for this year cannot be attributed to a scarcity of fish, but is wholly due to the extremely poor condition of the dry fish market, and the dispute between the American sardine canners and the Canadian weir owners over the price to be paid for sardine herring. The weather was exceptionally fine during the greatert part of the season and sardine herring and also most kinds of ground fish were very plentiful and if the market conditions had been at all satisfactory there would have been a record breaking catch.

# HERRING.

This has been another poor year for the large herring industry both smoked and salted in barrels. There were 2,560 barrels salted this year, against 2,460 in 1907, but a good catch would be at least 8,000 barrels. There is also a large decrease in the amount of herring smoked as compared with last year, or any recent year. Last year there were 3,995,700 pounds of smoked herring and this year only 1,493,000 pounds. This large decrease is due to the failure of the medium sized and large herring fishery at Grand Manan. Their weirs were teeming with small sardine herring, but very few larger ones.

# SARDINES.

I have to report an increase of 33,985 barrels in the catch of sardine herring over the previous year. In 1907, 252,269 barrels were caught while the catch for this year totalled 286,254 barrels. But this increase of 13 per cent does not, by any means, show the relative proportion of these fish that were in the weirs this year, as compared with last year. Never in the history of the sardine industry were there so many of these fish in the weirs as there were this season, but owing to the disagreement regarding the price to be paid for them only an ordinary yield was taken out.

#### SALMON.

There is a large falling off in the salmon catch for this season. Carefully prepared returns show that the amount of salmon sold fresh in 1907 was 430,000 pounds and 310,000 lbs. this season; a decrease of 27 per cent. A large portion of the decrease is due to the fact that the traps in St. John Harbour did very poorly. The drift fishermen out in the Bay of Fundy had an average catch.

### LOBSTERS.

Again I have to report a decrease in the catch of the lobster fishermen, about 17 per cent in the amount sold fresh and 42 per cent in the amount canned. I would respectfully urge the adoption of the  $10\frac{1}{2}$  inch size limit upon lobsters in this district. The State of Maine lobster regulations are much better for this section than our present regulations. In Maine they have a size limit that is the equivalent of the ten one half inch measure on our side, and it is highly satisfactory, and almost unanimously our fishermen are asking for it. I would very much like to see the Maine regulations, both as regards the size limit and a long open season given a good trial in this district. I feel sure that if it is done and the regulations are rigidly enforced that this fishery will be placed on a much better basis than at present. I have to report, however, that the nine inch limit is being well observed, but situated so closely as our fishermen are to the American markets, they prefer to allow the nine inch lobster remain in the ocean until it has reached  $10\frac{1}{2}$  inches in length, when it will not only increase ten fold in value, but will be large enough to reproduce it's kind.

#### COD.

This fishery remains about stationary. There is a slight decrease in the amount dried, and quite a large increase in the amount sold fresh; taken altogether there has probably been a small increase in the yield for this year. The figures are: 1907, 5,042 cwt. dried and 202,800 lbs. sold fresh and frozen. In 1908, 4,639 cwt. were dried and 386,800 lbs. fresh.

## HAKE.

The extraordinary large catch of hake for 1907 was duplicated this year; in fact the catch this year exceeded that of the previous year, but there is a lamentable difference in the price paid for dry hake last year and this. In 1907 they brought as high as \$3 per cwt. This year they sold as low as \$1.25 per cwt. There were 38,032 cwt. caught during 1907 and 39,400 cwt. this year. Hake sounds also dropped from an average of fifty cents per lb. in 1907, to about twenty five cents in 1908.

# HADDOCK.

The quantity of haddock sold either fresh, dried, or as finnan haddies was greater than the previous year. In 1997 there were 1,486,000 lbs. sold fresh, 686 cwt, dried and 108,300 lbs. of finnan haddies. In 1908 there were 1,547,700 lbs. sold fresh, 996 cwt. dried and 194,900 lbs. of finnan haddies.

22-8

#### POLLOCK.

An increase of about 20 per cent is to be noted in the returns of the pollock fishery. There were 25,860 cwt. caught in 1907 and 30,565 cwt. this season. Very little dynamiting was done this year. The Curlew did good work in patroling the off shore grounds, and I cannot speak too highly of the work performed by Guardian Harvey at Whitehead. Patrolmen Mitchell and Cline assisted by Guardian Fountain at Deer Island, working in conjunction with the fishery officer from the State of Maine, were able to effectually check the American dynamiters and as a result the pollock were very plentiful and remained on the shores until December.

#### CLAMS.

47,943 brls. of clams were sold in 1907 and only 10,765 brls. this season; a falling off of about 78 per cent. There were 594,000 cans of clams put up at the Charlotte County canneries this year as against 649,864 cans in 1907. The shortage in the yield of the clam industry is occasioned by the lack of demand for canned clams in the American markets. There were so many of the sardine canneries at Eastport and Lubec, Me., converted into clam canneries during the winter of 1907-8 that their market was simply glutted with the product, and as a result very few operated this year. As the Canadian canners sell a large part of their pack in the United States there was a decrease in the quantity put up by them as compared with 1907.

### ALEWIVES.

The catch of alewives for this year is considerably less than last year. The totals are 13,133 brls. in 1907 and 10,150 in 1908.

# DOGFISH.

Dogfish were not very numerous this season and the fishermen were bothered very little by them

#### VIOLATIONS.

The different regulations for the protection of the fisheries were well observed and

I have to report very few violations.

In conclusion I may say that the prospects for the coming year look very good. Fishermen also report ground fish as being plentiful, but owing to the low prices prevailing not much energy is being put forth in their capture. The trawl and hand line fishermen are nearly all supplied with motor boats of the very best models and all they need to make the business a success is good markets, and I would urge upon your department to exert your utmost through our foreign commercial agents to open up markets for our fishery products. The paying of a portion of the express charges upon fresh fish from the maritime provinces to the western Canadian markets, by your department has helped our fishermen immensely and is greatly appreciated by them.

Again I have to thank your officials for courteous treatment.

I have the honour to be, sir,

Your obedient servant,

JOHN F. CALDER,
Inspector of Fisheries.

# DISTRICT No. 2.

COMPRISING THE COUNTIES OF ALBERTA, WESTMORLAND, KENT, NORTHUMBERLAND, GLOUCESTER AND RESTIGOUCHE.

Монстон, 1909.

To the Superintendent of Fisheries, Ottawa.

Sir,—I have the honour to submit my report of the fisheries for district No. 2 in the province of New Brunswick, consisting of the counties of Restigouche, Gloucester, Northumber land, Kent, Westmorland and Albert, together with the parish of Stanley in the county of York, and the parish of Aberdeen in the county of Carleton, for the fiscal year 1908-9, and returns giving the products and values by districts and counties, also an estimate of the capital employed in the prosecution of these fisheries.

These returns show aggregate values of \$3,346,146 which is below that of last year, but the difference except in smelts is made up by reduction in prices of several kinds

of fish.

I will now briefly review in detail, the conditions, and catch of the principal kinds of fish.

#### SALMON.

Very nearly as many were taken as in 1907, the falling off was in the Miramichi River districts, though they were exceedingly plentiful during spawning season, in the fall, in all the streams emptying into this river, and tributaries, as well as everywhere else.

### SHAD.

More of these in the past few years came up into our freshwater streams at the head of the Bay of Fundy to spawn than previously, but no real improvement can take place with this fishery, until a close time is made and enforced, while they are spawning. I do hope the recent commission may lead to something along these lines.

### HERRING

were if possible, more plentiful than ever in the spring of 1908, and immense quantities were taken for every purpose for which they could be used, fall fishing on the Miscou, Caraquet banks was also good, though these fish were followed by large numbers of dogfish.

#### MACKEREL.

There was a fair catch of these fish on all parts of our coasts where usually taken.

#### COD

Larger catches were reported in most places than the year before but prices were lower.

 $22 - 8\frac{1}{2}$ 

### SMELTS

appeared to be extremely plentiful on our coasts last fall but did not come into the rivers in anything like the usual quantities, while in outside districts the catch was large, many believe the very dry weather last fall, and the very small run of fresh water in the rivers was largely the cause of such a small catch in them which very much reduced the quantity especially from the enormous one of the previous year.

#### LOBSTERS.

The pack was fully up to that of the year before which was larger than for a good many years, better attention to the preservation of the berried lobsters of late years, and the hatcheries are both no doubt helping the supply.

## OYSTERS.

More were raked than for some years notwithstanding the much shorter season allowed by the present regulations.

#### CLAMS.

Not so many quahaugs were raked, the market being dull, owing to general depression, but a great many were sold in adjacent towns and villages, and some peddled around even in country districts. Rather more soft shell were taken than ever, Messrs. A. & R. Loggie having put up large quantities in there cannery at Inkerman, and many were used locally.

Of the other kinds of fish caught in our waters fully the usual quantity was taken

in the aggregate.

I have the honour to be, sir,

Your obedient servant,

R. A. CHAPMAN,

Inspector of Fisheries.

# DISTRICT No. 3.

COMPRISING THE COUNTIES OF KINGS, QUEENS, SUNBURY, YORK, CARLETON AND VICTORIA.

Fredericton, 1909.

To the Superintendent of Fisheries, Ottawa.

Sir,—I have the honour to submit my seventh annual report on the condition of the fisheries in district No. 3 (inland), in the province of New Brunswick, for the fiscal year ending March 31, 1909, together with statistics showing the quantity and value of fish taken, also the materials used and value of same.

In comparing the results of operations in 1908-9 with 1907-8, I find that last year, from a general view point, fishermen received considerably better returns for their

labour.

1007.8	Value of fish. \$30,092 00	Value of materials.
	\$30,092 00	\$44,848 00
1908-9	37,394 50	43,158 00

showing an increase in value of fish taken of \$7,302.50, with a decrease in value of

material used amounting to \$1,690.

While this was quite satisfactory to fishermen, it does not prove a proportionately larger catch of fish as one might suppose from a first glance. In 1907.8 your department directed me to put the price of fresh salmon at 15 cents per lb., whereas for many years it had been quoted at 20 cents. This, I consider, did not show a correct valuation, so I have put the price of salmon at 20 cents this year. Also I have put the price of salted shad at \$12 per brl. instead of \$10 as formerly, fresh shad I have put at 10 cents per lb. instead of 5 cents, sturgeon at 9 cents instead of 8 cents, and caviare at 85 cents instead of 90 cents. Apart from the consideration of enhanced prices, or taking the same prices for both years, and still we have a net gain of \$1,761.50.

The conditions for fishing were quite favourable throughout the season.

The regulations enacted in June, 1908, allowing the taking of salmon with nets in the non-tidal waters of the St. John river up to Andover Bridge, in Victoria county, each alternate two weeks throughout the fishing season, were, generally speaking, highly appreciated, but, as is the case sometimes, there are those who do not appreciate a generous act, but clamour for more. There is an agitation on foot to ask the honourable the minister of Marine and Fisheries to grant those persons living between the head of tide-water and Andover Bridge the same privilege, that is, continuous net fishing in open season, as is allowed in tidal water. I would very strongly protest against any such regulation. Now that the salmon fishery of the St. John river is good, and is, I think, without any doubt, improving, it would in my opinion be unwise to grant any further concessions. With proper protection, unless some unforeseen thing arises, salmon fishing on the St. John river will assuredly be good for many years to come.

I am very pleased to report that a few salmon were taken with the fly at the Hartt's Islands pools again last season. As reported a few were taken in 1906, but none in 1907. An effort was made last year to have the provincial Legislature pass legislation authorizing a company to build a fifty foot dam on the Tobique river for the purpose of pulp and paper manufacture, but without success. Had authority been given for this and had the Dominion authorities not interfered, it would, I think, in a very short time, have been fatal to the salmon fishery on the whole St. John river

waters and possibly the harbour fishery as well.

At the close of the salmon fishing season I came in a canoe from Andover Bridge to Fredericton and found matters in very good condition and a free passage for fish the whole distance. Through the season, a few persons who seemingly consider themselves wise, undertook to defy the law, but a few introductions to the police court had the desired effect. Two assaults were made on two of my special guardians, but as this

is always done in dark nights, it is most difficult to get convicting evidence against these illegal fishermen. The salmon fishing on the Tobique river was not a great success last season. I do not think it was because of few salmon reaching the pools,

but for causes which affect surface fly fishing more or less everywhere.

There has been more or less agitation to have fishways built in dams in different places in my district. I have examined these places and the condition of the streams and I am of the opinion that it would be utterly useless to have them built. There may be an exception where it would be advisable to build a fishway, but I have failed to find the exception.

SHAD.

Regarding these splendid fish, I have to make the same report as last season. It is useless to speculate as to the cause of the deterioration in this fishery. Possibly regulations allowing a very limited fishing season for shad might in time bring it back to something like its former large proportions; otherwise, it seems to be going the way the great sturgeon fishery of the St. John river did some years ago. I sincerely trust that the commissioners appointed last year, and who collected information on this matter, may be able to suggest some remedy.

#### ALEWIVES.

There was a gratifying increase in the catch of alewives last season over 1907–8. This fishery is a great source of income to our people and does not take very much of their time from the fact that they swim in great schools, if they come at all worth bothering with and one man can attend to many nets. They come in upon the height of the spring freshet and for only a short time. Nets are set about in the streams, and over meadows where later in the season a good crop of hay is harvested. There was a ready sale for alewives.

#### TROUT.

These fish are not very important in size, but they are probably responsible for the movements of more people than any other fish in the inland waters of the province. Some angling permits (foreign) were sold last season and sportmen did not seem to mind paying \$5 fee, in fact they very willingly pay it if they can be assured of one or two days good trout fishing. There are a great many very beautiful lakes in this district, if conditions are suitable for trout, and they were stocked for a few years with fry, which would become quite revenue producers to both the government and the people living near them, in fact I believe quite a good percentage of the cost of fishery protection in my district could be made up through the sale of angling permits, if the stocking process were successful, besides the very great pleasure afforded our own people.

#### PICKEREL.

Reports from my overseers indicate about the same quantity of pickerel taken in 1908-9 as the year previous. The average size of these fish is much smaller than it used to be.

# BASS.

I am very pleased to be able to report an increase again in the catch of bass. This fishery, some years ago, was a quite important item of revenue to people along the Belleisle bay, Kings county, and more or less were caught on the St. John river, but for some reason the profit and glory departed. I hope the present improvement will be steady.

#### STURGEON.

The reported catch of sturgeon is not encouraging for the past season, and possibly it is being carried on too extensively until these fish are given more chance to propagate. Probably it would not pay fishermen to incur the necessary expense in fitting out for this work if the season were shortened, but it does seem necessary to take some steps for the better preservation of the small sturgeon. A salmon fisherman has no use for sturgeon as they tear and tangle up his nets, and I believe many young fish

are destroyed when caught in salmon nets, simply to get rid of them. It is difficult though to get proof.

WHITEFISH.

There is a species of fish caught in Baker lake, Victoria county, called whitefish by the natives. They are somewhat smaller than the alewife, very good eating and quite plentiful. The same fish is found in the lakes between New Brunswick and Maine (St. Croix waters), though of a brighter colour, when the water gets cold in the autumn, but as this happens to be close season in New Brunswick they cannot be caught.

# SYNOPSIS OF REPORTS FROM FISHERY OVERSEERS.

There is nothing of particular interest from the special guardians in Kings county. Guardian Belyea, on the St. John river again suggests that sturgeon fishing be

prohibited for a few years.

In Queens county (east) overseer Hetherington says it is most difficult to get correct statistics from the fishermen. Speaking of one man from whom he asked returns and of which he was not quite satisfied, he found out from his shipping bills that he had shipped about double the amount of shad for which he had accounted. Apart from shad, the fisheries had yielded about the usual amount.

Overseer Belyea, Queens (west), reports conditions about as usual. Shad and ale-

wives not as plentiful. Salmon and pickerel more plentiful.

Overseer McLean, Sunbury county, strongly urges the necessity for a larger meshed

pickerel net.

For York County, overseer McKay reports that on the south-west Miramichi, salmon were very scarce throughout the fishing season, but after the nets were removed from the tidal waters, salmon became plentiful in the upper waters, and a goodly number reached the spawning grounds. The result of this is that where a great many sportsmen used to visit the head waters for fly fishing, very few go now. Trout fishing was very good, well up to the average.

Alewives are so scarce now that very few people attempt to catch them.

On the St. John river, salmon fishing was a fair average and much better than the previous year and the fish were of a larger size, many weighing from 20 lbs. to 28 lbs. He recommends a few days extension of open season for fly fishing at the Hartt's Island pools, as salmon do not take the fly there until about the 15th of August. In early spring land locked salmon were very plentiful at Skiff lake but after a short time they did not take the fly well. Mr. McKay again urges that lakes in his county be annually stocked with trout fry, for some years at least. Quite a large number of American sportmen have their summer homes on the borders of the lakes now and they are good money spenders. It is the trout fishing that induces them to come.

Overseer Leclair, Victoria county, reports salmon fishing on the Tobique river about the same as in 1907-8. As last year was the first time residents of his county, to Andover Bridge, had the legal right to fish for salmon with nets, and the regulations came in force so late in the season, the people had not prepared for it. It gave general satisfaction and the people living between Andover and Grand Falls would like the

privilege. Trout fishing was exceedingly good last season.

Overseer Gagnon, Madawaska, says the condition of the fisheries in his district was normal, with nothing of particular interest to report. In Carleton county, under the new salmon fishing regulations of last year, a large number of people applied for and took out licenses and some were quite successful in their catches of salmon.

As stated last year, I see nothing discouraging regarding the fisheries in my district,

apart from the shad deterioration.

In conclusion I wish to thank all with whom I have official dealings, for unfailing courtesy throughout the past year.

I have the honour to be, sir,

Your obedient servant,

H. E. HARRISON,
Inspector of Fisheries.

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the District No. 1, Province of New Brunswick, for the year 1908-9.

		Number.		H0100 470 0 p− 20				
	Smelt Nets.	Value.	69	:: 22:: 25:::	100	::::::	100	11 100
	v.Z	Number.	,	222222	181	9 9	00 11.	00
	Wiers.	Value.	€9	1600 29700 23100 44000 53200 4700 32100	202800 11 100	8700	9700	212500
	=	Number,		20 62 44 88 44 12 12 12 12 13	374	27	34	408
υů	Trawls.	Value.	₩	88 350 112 440 48 240 73 1460 95 2175 54 400	545 6915	325 910 15	1250 6915	8165
RIAL	Tra	Number.			1	15 40		1
FISHING GEAR OR MATERIALS.	Fish Factories.	Value.	€€	27000 27000 2500 12000	53500		53500	53500
AR OI	Fac	Number.		ee : :0	10		10	10
4G GE/	*6	Value.	<b>69</b>	1010 4125 3300 5280 5400 2450 4295	25860	1700 225 980	2905 25860	28765
Fishir	Seines.	Fathoms.		370 1860 2207 1460 1070 2040	12300	750 140 450	1340	13640
		Number.		. 868 888 888 883 883 883 883 883 883 883	396	152	35	431
	ts.	.enleV	60	750 1570 1010 9740 710 450	14230	11000 1530 13000	25880 14280	40110
	Gill Nets.	Fathoms.		2400 4350 3330 26050 1200	39150 14230 396 12300	510 123800 11000 111 14390 1530 1050 105000 13000 25 1250 350		282340
		Number.		40 98 101 101 59 38 38	1206	510 111 1050 25	12         200         7600         33         308         18925         531         1671         243190         25880         35         1340         2905         1         5715           92         1649         59700         329         2096         13785         1578         1206         39150         14280         2366         10         53500         545         66           104         1849         67300         362         2399         150730         2309         282340         40110         431         13440         28765         10         53500         609         81	2877
χå		Men.		70 168 215 278 240 225 352	1578 1206	22 22 22 22 22 22 22 22 22 22 22 22 22	531	2109
FISHING VESSELS AND BOATS.	Boats.	Value.	6/9-	1200 7235 5640 8400 30300 22530 56500	2096 181805	5700 1550 11000 175 500	18925 131805	150730
S AN		Number.		65 131 295 278 164 164 270 293	9602	115 113 22 24	303	3399
SSEL		Total fish-	-	26 26 214 214 24 18	329	. 6. 15.	329	362
NG V	sels.	Value,	€€	5700 2300 2700 41500 5700 1800	59700	2000	7600	67300
ISHI	Vessels,	Tonnage.		174 85 85 44 1130 1185 31	92 1649	84 56 40 20	200	849
i i		Number.			92	4401		1041
	Districts.		Charlotte County.	Lepreau to Red Head   Red Head to Letang   B. Letang to St. George   4 St. George to St. Stephen   6 Grand Manan   6 Campobello   7 West Isles	Totals Sk. John County.	1.St. John Harbour. 2 Lepreau to Chance Harbour 3 Chance Harbour to Mispec. 4 Mispec to Tynemouth Creek 5 Tynemouth Creek to Albert Co.	Totals. Charlotte County.	Grand totals

SESSIONAL PAPER No. 22

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the District No 1, Province of New Brunswick, for the year 1908-9-Continued.

				LOBSTER PLANT.	ir Pl	ANT.		`		Отнв	R FIXT	URES	USED	IN FI	OTHER FIXTURES USED IN FISHERIES.			WHOLE
DISTRICTS.	Hand Lines.	1	Canneries.	ries.	Traps.	ps.	ployed	Fre and Ho	Freezers and Ice Houses.	and Ho	Smoke and Fish Houses.	Wb	Piers and Wharfs.	Stean	Tugs, Steamers and Smacks.	S. B.	Scows and Reels.	GEAR.
	Number.	Value,	Number.	Value.	Number.	Value.	Persons em	Number.	Value,	Number.	.9ulaV	Number.	Value,	Number,	Value.	Number.	Value.	·9nlæV
Charlotte County.		69		6€		<b>6/</b> €			<b>6</b>		<b>60</b>		€€		<b>€</b> ₽		€€	60
Lepreau to Red Head 2 Red Head to Letang 3 Letang to St. George 4 St. George to St. Stephen 5 Grand Manan 7 West Isles 8 St. George and vicinity	350 350 1465 145 400	175. 175. 1465 375 200	:- :: «¬ : :	4000 5000 1 2500	1300 2065 1016 440 2800 1250 750	1300 2065 508 440 12800 700	+45 +280 +16 50 11 +75		2950	222 322 322 3418 91 40	1800 3800 1550 2300 2300 2860 1600	24 16 16 176 176 176	2200 9000 1240 600 63000 3200 2500	122	7000 6600 4460 1500	31 88 32 	600 1050 3800 1700	42210 105635 44845 70360 342565 48175 114045
Totals	3000	2255	4	11500	19615	18760	477	10	4050	612	127910	212	81740	30	19560	163	7150	767835
St. John County.			1															
1 St. John Harbour. 2 Lepreau to Chance Harbour 3 Chance Harbour o Mispec 4 Mispec to Tymemouth Creek 5 Tymemouth Creek to Albert Co.	112	10			240 535 2025 1500 600	240 535 2025 1100 900	: : : :	2 :	3500	22. 24. 	24000 1200 2450	84 6 10	35000 600 3210	:: -: ::	1000			87140 7965 41385 4275 2430
Totals Charlotte County	3000	75 . 2255	: 4	11500	4900 19615	4800 18760	477	10	4600	65	27650 127910	100	38810 81740	30	1000	163	7150	143195 767825
Grand totals	3092	2330	14	11500	24515	23560	477	19	8650	I	677 155560	ì	312 120550	31	20560	163	7150	911030

9-10 EDWARD VII., A. 1910

Return showing the Kinds and Quantities of Fish and Fish Products in District No. 1, Province of New Brunswick, for the Year 1908-9.

					1	9-10 EDWA	KD VI	II., A
[	Number.	1	128470			H 01 22 473		
	Halibut, lb.		1800	11000			11000	11000
	Pollock, ewt.		925 2665 75 6600 16750 3500	30515		20	50	30565 11000
	Hake, sounds, lb.		6500 450 240 6000 8000 2000	21390		2500	6500 21390	27890
	Hake, dried, cwt.		18500 900 100 6550 7170 300	33520		3840	5880	39400
	Haddock, smoked fin- nan haddies, lb.			194900			996 194900	996 194900
	Haddock, dried, cwt.			966			966	1
	Haddock, fresh, lb.		205000 50000 34700 9000 1004000 71500	1373700		105000	174000	1547700
ISH.	Cod, fresh, lb.		45000 48300 30000 50000	173300		63500	76 213500 4563 173300	31968 7180 4639 386800
OF F	Cod, dried, cwt.			4563		: ::	76	4639
NDS	Lobsters, fresh in shell, cwt.		<del></del>	5362		110 343 560 405 400	1818 5362	7180
Kı	Lobsters, preserved in cans, lb.			i			31968	1
	KINDS OF FISH.  Salmon, fresh, lb.  Salmon, salted, ord.  Salmon, fresh, lb.  Salmon, fresh, lb.  Salmon, salted, ord.  Salmon, fresh, lb.  Salmon, fresh, lb.  Salmon, fresh, lb.  Salmon, salted, ord.  Salmon, fresh, lb.  Salm	103000	16000 103000					
				}			16000	
	Herring, smoked, lb.		: : 23 ::	1423000		70000	70000	1493000
	Herring, fresh, lb.					2 : :	28500 284600	313100
	Herring, salted, brls.		800 10 1610	2420			140 2420	2560
	Salmon, salted or smoked, lb.			:		6500		6500
	Salmon, fresh, lb.					84000 42900 184040	31.0940 6500	310940 6500 2560
	Number, Dispricts,	Charlotte County.	1 Lepreau to Red Head 2 Red Head to L'Etang 3 L'Etang to St. George 4 St. George to St. Stephen 5 Grand Manan 6 Campobello. 7 West Isles. 8 St. George and vicinity	Totals	St. John County.	1.St. John Harbour. 2 Lepreau to Chance Harbour. 3 Chance Harbour to Mispec. 4 Mispec to Tynemouth Creek. 5 Tynemouth Creek to Albert Co.	Totals Charlotte County	Grand Total

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish and Fish Products in District No. 1, Province of New Brunswick, for the Year 1908-9—Continued.

Number.	- 000000001 - 100400F0	31	900
Total Value of All Fish.	\$ cts 48,476 0 388,857 2 68,927 5 202,565 7 117,188 0 103,340 0 2,750 0	88,822 26,287 62,371 4,050 4,132	185,663
Dulse.	146000	153000	530 153000
Cockles, No.			
Fish as manure, brls.	2675	2955	295
Fish as bait, brls.		8 : : : :	1000 18515 19515
Fish oil, galls.	50 4600 830 320 6050 14850 1600	28200	28300 18515 2955 30600 19515 2955
Squid, brls.			295
Clams shelled, galls.			8000
Canned clams, lb.	115200 364800 69000 45000	594000	10765 594000
Clams, brls.	·		
Canned sardines, brls.	4399000	4899000	4899000
Sardines, brls.	12770 14550 32457 142227 34700 4150 30400	8000	300 15000 271254
Eels, brls.			
Scallops, brls.	613	3173	3173
Canned haddies, cans.	24000		24000 3173
Alewives or gaspereas, bris.			10150
Sn.elts, lb.		100   1111	73 99500
Shad, bris.	- 23	400	730
Districts.	Charlotte County.  Charlotte County.  Et and to L'Etang Etang to St. George and Manan ampobello est Isles George and vicinity	Totals.  St. John County.  5. John Harbour epreau to Chance Harbour hance Harbour Chispec to Tynemouth Creek.	Totals County
	Shad, brls.  Shad, brls.  Alewives or gaspereau, brls.  Canned haddies, cans.  Canned ardines, brls.  Clams, brls.  Brish as bait, brls.  Clams, brls.  Clams, brls.  Clams, brls.  Brish as bait, brls.	### Shad, brls.    Shad, brls.   Shad, brls.   Shad, brls.   Shad, brls.   Shad, brls.   Shad, brls.   Shad, brls.   Sandines, cans.   Seallope, brls.   Seallope, brls.   Sandines, brls.   San	Shad, bris.   Shadon   Shado

# RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 1, New Brunswick, comprising the Counties of St. John and Charlotte, for the Fiscal Year 1908-9.

Kinds of Fish.	Quantity.	Price.	Value.
Salmon, fresh	Quantity.  310,940 6,500 2,560 313,100 1,493,000 16,000 103,000 31,968 7,180 4,639 386,800 1,547,700 996 194,900 30,400 27,890 30,565 11,000 613 106,500 10,150 24,000 3,173 300 286,254 4,899,900 10,665 594,000 8,000 295 30,600 19,515 2,955	Price.  \$ cts. 0 15 0 20 4 50 0 01 0 03 0 06 0 10 0 30 0 04 0 03 3 00 0 06 0 2 50 0 10 12 50 0 10 2 50 0 10 2 50 0 10 2 50 0 10 2 50 0 10 0 50 0 15 0 15 0 10 0 50 0 10 0 50 0 10 0 50 0 10 0 50 0 10 0 50 0 10 0 1	\$ cts 46,641 00 1,300 00 11,520 00 3,131 00
Ockles Dulse	530 153,000	5 00 0 06	2,650 00 9,180 00 1,374,792 40 1,554,601 00
Amount of decrease for 1908			179,808 60

# RECAPITULATION

Of the Number and Value of Vessels, Boats, Weirs, Fish-houses, &c., used in the Fisheries of District No. 1, New Brunswick, comprising the Counties of St. John and Charlotte, for the Fiscal Year 1908-9.

No.	Material.	Value.	No.	Material.	Value.
2399 2877 431 10 602 408 11	Fishing vessels (1849 tons) Fishing boats Gill nets (282,340 fathoms). Seines (13,640 fathoms). Fish factories Trawls. Weirs Smelt nets. Hand lines.	\$ cts. 67,300 00 150,730 00 40,110 00 28,765 00 53,500 00 8,165 00 212,500 00 100 00 2,330 00	24515 19 677 312 31	Lobster canneries. Lobster traps. Freezers and ice houses. Smoke and fish houses. Piers and wharfs. Tugs and smacks. Pile drivers and scows. Total value of material	\$ cts 11,500 00 23,560 00 8,650 00 155,560 00 120,550 00 20,560 00 7,150 00 911,030 00

Number of persons employed in 1908 :-

Men in vessels	362
Men in boats	2,109
Persons in canneries and fish-houses	477
_	
Total	2,948

9-10 EDWARD VII., A. 1910

Return showing the Number, Tonnage and Value of Vessels and Boats and the Quantities and Value of all Fishing Materials, in District No. 2, Province of New Brunswick, for the year, 1908-9.

1		Number.		-63			64700			10 8 4		=======================================
	ts.	Value.	69	: :			500	20		246 1700	246 1700	150 11
	Bass Nets.	Number.					10	10				21
	wls.	Value.	₩		:		1500 200 800	2500		100	250	300
NALS	Trawls.	Number.					260 1 40 160	460		9	11	H
FISHING GEAR OR MATERIALS.	Smelt Shanties.	Value.	€	1600	2000		700 1650 1100	3450		2500 6000	14500	3000
AR O	Sha	Number.		200	102		38 74 75 52	164		120 300 300	720	152
HING GE		Value,	€€	10000	30000		22000 45000 15000 17000	00066		40000 70000 25000 12000	147000	24000
FISI	Gill Nets.	Fathoms.		10060	34600		41000 76000 95000 50000	262000		43000 82000 30000 23000	178000	77400
		Number.		36	176		850 2200 4500 1500	9050		600 850 450 375	2275	4920
		Меп.		380	430		930 1400 600 1400	4330		500 600 200 170	1470	518
Boats.	Boats.	Value.	69	9200	4180		11000 18000 9000 26000	64000		8000 10000 4000 2600	24600	17000
AND		Number.		44	256		460 650 310 550	1970		250 215 160 145	220	268
SSELS		Total Fishermen.		4	4		580 102 320	1002		200	35	19
FISHING VESSELS AND BOATS.	Vessels.	Value.	¢9	200	200		61000 10000 40000	111000		3000	2000	2200
Fis	Å	Tonnage.		26	26		300 300 980	3080		85	131	61
		Number.		:	-		145 25 75	245		9	10	9
	DISTRICTS.	Vuniber.	Restigouche County	1 Above Dalhousie. 2 Below Dalhousie.	Totals	Gloucester County.	3 Beresford and part of Bathurst	Totals	Northumberland County.	7 Neguac and vicinity 8 Bay du Vin and vicinity 9 Chatham and vicinity. 10 Southwest and Northwest Miramichi rivers.	Totals	Kent County.  Il Richibucto, St. Louis, &c

SESS	SIONA	٩L	PAPER	NO. 2	22	
132			115 115 116		18	_
::	150					1900
::	27				:	277 1900
::	300					482 3050
::	=			:	:	482
4000	4400		400 2000	2100	;	26450
51	223		85 20 12 	117	:	1326
14000	45000		17000 11000 3500 2400	33900	2100	357000 1326
48000	153400		48000 32000 12000 7000	00066	3700	730700
2400	8470		1150 780 610 161	2701	31	22703
950	2078		900 950 870 60	2280	35	10623
8000	46000		16000 19500 5000 1600	42100	200	181580
580	19 1243		485 525 265 32	1307	21	1060 5567
	19				:	9
	2200					120700
:	19				:	3295
::	9			1:	:	262
12 Buctouche, St. Mary's, &c. 13 Parish of Dundas.	Totals	Westmorland County.	14 Shediac Moncton, &c. 15 Botsford 15 Sackville and Westmorland. 17 Dorchester.	Totals	18 Albert County	Grand totals

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantities and Value of all Fishing Materials, in District No. 2, Province of New Brunswick, for the year 1908-09—Continued.

		Number.		757			00 4 TO O			2000	,	11	12
	ra C		cts.	88	100		8888	08		8888	8	00	00 12
	WHOLE FISHING	(AEAE.	<b>66</b>	28,000 48,100	76,100		46,400 189,500 111,300 190,000	537,200		96,200 139,300 99,540 19,250	354,290	106,300	75,950
Z.	Tugs Steamers & Sm'cks	Value.	€/9-	1700	3700		3000 6000 1600	10600		2000	0009	2500	
IERI	Se St	Number.		407	9	İ	:422	44	1	8 :0 .	18		
n Fise	Piers and Wharfs.	Value.	9€	200	200		2500 23000 1000	26500		2000	5000	5500	
I Q	H	Number.		· you	IT	Ī	:24H	18		:⊣::	1	17	
tes usi	Smoke and Fish Houses.	•ən[æ∧	<b>∜</b>	9006	006		600 10000 3000 14 8000 1	21600		2000 150 9500 650	12300	300 17	006
KTUI	Sund Ho	Number.		4	4		99708	140		32 20	119	च्नुन	00
Other Fixtures used in Fisheries.	Freezers and Ice Houses.	Value.	<b>6</b> 0	8000	18000		3000 5600 2000	19600		4000 3000 15000 2300	24300	12400	4000
OT	Fre and Hor	Number.		410	6		30	54	<u> </u>	6 25 10	48	17	4
	loyed in	Persons emp		48	48		170 580 300 1200	2250		150	350		310
ANT.	ps.	Value,	<b>66</b>	100	6100		7000 25000 15000 57000	104000		10000	18000		20000
er Pl	Traps.	Number.		100	0099		7500 26000 18000 60000	111500		10500	18500	23800	20500
LOBSTER PLANT	Canneries.	Value.	€		2600		2500 11000 12000 32000	57500		6500	10500		7500
	Cam	Number.		:03	22		4 61 9 88 38	70		∞ en · ·	11	10	25
z z		Value.	60	20.	20		300 2000 400 900	3600		100	140		150
GEAL	Hand Lines.	Number.		20	50		350 300 2500 2000 600 400 1400 900	4850		150	210	640	400
FISHING GEAR OR MATERIALS.	Smelt Nets.	.enlaV	<b>%</b>	2000	7900		4200 7000 2600	13800		17000 30000 36000	83000	12200	7400
FI	Sm Z	Number.		118 25	143		 141 56	284		155 400 450	1005	305	161
	Districts.	Number.	, Restigouche County.	1 Above Dalhousie. 2 Below Dalhousie.	Totals	Gloucester County.	3 Beresford and part of Bathurst	Totals	Northumberland County.	7 Nequac and vicinity 8 Bay du Vin and vicinity 9 Chathan and vicinity 10 Southwest and Northwest Miramichi rivers.	Totals	Kent County.  Il Richibucto, St. Louis, &c	12 Buctouche, St. Mary's, &c.

32,350 00 13	00 009		00 14 00 15 00 16 00 17	10		
- 1	214,600		85,240 0 118,430 0 17,925 0 4,200 0	225,795 00	3,400 00 18	51500 47 41200 77 25800 1,411,385 00
	2500		2000	3000	:	25800
: 1	H j		: 10 co :	oo		12
	5500		3000	8 4000 8		41200
: [	1900 17		:44:	100	] :	0 47
200			5000 4500 5000 200	146 14700	100	5150
9	18		20 64 52 10	146	2	429
200	16600		1000 4500 600	6100		5342 182 84600
T	22		38 10 ::	49	1 :	182
120	664		720	2030	1:	5342
10000	52000		30000	00006	200	270600
10200	54500		31700	95700 90000 2030	200	02600 287300 270600
2500[	14500		6500	59 17500	:	00920
9	47		30	59	:	1841
50	450		40 30 55	95		6620 4305
140	1180		120 110 100	330	1:	029
3500	23100 1		8200 2500 1600	280 123000	:	40100
74	540		165 70 45	280		2552
as	Totals	Westmorland County.	14 Shediac, Moncton, &c. 15 Botsford 16 Sackville and Westmorland 17 Dorchester	Totals	18 Albert County	Grand totals
13 Parish of Dundas			Shediac, Botsford Sackville		Albert C	

9-10 EDWARD VII., A. 1910

RETURN showing the Kinds and Quantities of Fish and Fish Products in District No. 2, Province of New Brunswick, for the Year 1908-09.

Ct.	Number.		H 63			604700			7 8 9 10			H
	Trout, lb.		4000	8450		10000 9000 5500 500	25000		6500 1600 5000 20000	33100		6200 11
	Halibut, lb.		: .				5300 6000 140000		2000	3500		1550
	Hake, sounds, lb.		::	1 :		3000 400 2600	0009		: 009	009		1750
	Hake, dried, cwt.		.100	100		200 2500 600 2000	5300		200	720		500 1700 1750
	Haddock, dried, ewt.		* .	! :		1100 200 300	1900		1000	1150		500
	Cod, tongues and sounds, bris.		: :	1:		.220 40 120	380		: : : :		1	
	Cod, dried, cwt.			:		3500 41000 9000 24000	77500		1000	1580		1248
	Lobsters, fresh in shell, cwt.		200	300		200 510 250 140	1100	-	130	230		157
KINDS OF FISH.	Lobsters, preserved in cans, lb.		37800	37800		27000 167000 172000 582000	948000		116000	211000		303700 157
S OF	Mackerel, salted, brls		::	:		40220	69		: : : :	:		190
KIND	Mackerel, fresh, lb.			:		4000 16000 25000 32000	77000		3000	63000		061  000581
	Herring, smoked, lb.		247000	247000		25000	25000					
	Herring, fresh, lb.		148000	448000		150000 350000 120000 100000	720000		30000	103000		265000
	Herring, salted, brls.	-	1360	1360		13000 34000 12000 18000	27000		3000	12160		6200
	Salmon, salted or smoked, lb.		::	:		800	800		4000	4000		240
	Salmon, preserved in cans, lb.		::	:	1	400	1600					320
	Salmon, fresh, lb.		108200	252400		110000 290000 86000 2000	488000 1600		78000 162000 95000 96000	431000		116000
	Number. Districts.	Restigouche County.	1 Above Dalhousie.	Totals	Gloucester County.	Beresford and part of Bathurst	Totals	Northumberland County.	7 Neguac and vicinity 8 Bay du Vin and vicinity 9 Chatham and vicinity 10 Southwest and Northwest Miramichi rivers	Totals	Kent County.	11 Richibucto, St. Louis, &c
	moderat M											-

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3000112	1550 11700		11600 14 7500 15 2400 16 3600 17	25100	9000 18	050 112350
150	1			;   ;	:   :	500 145
80	500 2000 1900	***	100	110		3550 8230 8
	500		: : : :	1:		0 3550
 0 <del>1</del> 10	1498	1	200	240		80818 380
120 1	377 14		23C 1 450 1 200	880	250	37 808
165200 15 64400 10	533300 37			35 1900 88		2685000 3137
165	1		230500 720400 4000			26850
:::	061 0		: : : :	:	:	259
3000	190500		3500 4500 1300	9300		339800
			660000 220000 800000	650000 1680000		1952000
230000	555000		380000 200000 70000	650000	15000	$310200 \  1920  \ 5040 \  151470  \ 2491000 \  1952000  \ 389800$
18000	292(0)		16500 13200 1500 1500	31250	400	151470
::	240				:	5040
:::	320			1 :	:	1920
•	116000		3200 1500 12000	16700	6100	1310200
12 Buctouche, St. Mary's, &c. 13 Parish of Dundas.	Totals	Westmorland County.	15 Botsford 16 Sackville and Westmorland 17 Dorchester	Totals	18 Albert County	Grand totals

RETURN showing the Kinds and Quantities of Fish and Fish Products in District No. 2, Province of New Brunswick, for the Year 1908-09—Continued.

	Number.		77			8450		_	10.00	V 11.,	
	53 4	cts.	88	8		8888	8		8888	8	50[11
	TOTAL VALUE OE ALL FISH.	€	. 27560 61645	99205		129970 553340 262095 470495	1415900		150120 226910 141510 49680	568220	234702
	Seal skins, number.		::			22,508	7.2				12
	Fish as manure, brls.		600	009		22000 35000 10000 25000	92000		460n 30000 500	34500	4600
	Fish as bait, brls.		120	140	_	$\begin{array}{c} 1800 \\ 12000 \\ 4000 \\ 16000 \end{array}$	33800		2000	0009	3800
	Fish oil, galls.					200 15000 2500 8000	25700		100	100	006
	Coarse and mixed fish, brls.		45	45		375 800 850 700	27.25		4000	4000	210
	Squid, brls.		: :			420 60 200	685				120
Fish.	Tom Cod or frost fish, 1b.		15000	29000		12000 150000 50000 30000	242000		32000 70000 1400000 80000	1582000	50000 120
S OF F	Flounders, lb.		40000	59000		14000 40000 30000 25000	100000		300000	330000	170 22000
KINDS OF	Clams, brls.			:		2500 4300 9500 3500	19800		300	500	170
	Oysters, brls.					800	880		2400 9000 600	12000	310
	Eels, brls.		50	96		20 200 360 110	069		140 200 60 560	096	460
	Bass, lb.	-				1000 9000 7000 8000	25000		12000 5000 5000 124000	146000	22000
	Alewives or Gaspereau, brls.		: :	:		180	180		180 400 350 1720	2650	1640
	Smelte, lb.		258000	391000		4000 310000 450000 420000	1184000		360000 800000 940000 20000	2120000	410000 1640 22000 460
	Shad, bris.		: :				122		300 130 200 400	1020	120
	Dispricts.	Restigouche County.	1 Above Dalhousie.	Totals	Gloucester County.	3 Beresford and part of Bathurst	Totals	Northumberland County.	7 Neguac and vicinity 8 Bay du Vin and vicinity 9 Chatham and vicinity 10 Southwest and Northwest Miramichi rivers.	Totals	Kent County.
	Number.	1	77			8430			F-0000		

215437 50/12 92925 00/13	543065 00	261510 00 14 381240 00 15 53931 00 16 14480 00 17	711161 00	8595 00 18	3346146 00
215 92		261 381 53 14	711	00	
<u> </u>	12			:	8
26000	45600	30000	95000	:	267700
4200	9200	14000 32000 6500	52500	:	825 9580 26700 102140 267700
: :	006				26700
1200	1810	900	20 1000		9580
	120	200		:	
40000	110000 120 1810	32000 12000 18000 6000	00089	38000	2069000
10000	47000	12000	12000	:	32310 557000
3400	7170	2700 1100 1000	4800 15	40	1
2800	4710	1050 300 140	1490	:	19080
120	730	165 70 85 65	390	. 70	2936
3000	27000	3100 2000 1900	7000	009	205600
650 340	2630	360 180 200	740	-	6200
320000 140000	870000	320000 340000 85000	745000 740 7	0009	5316000 6200 205600 2936
: :	120	45 30 180 1050	1305	110	2677
12/Bouckcuche, St. Mary's &c. 13 Parish of Dundas.		Westmortand County.  14 Shediac Moncton, &c. 15 Botsford. 16 Sackville and Westmorland. 17 Dorchester.	Totals	18 Albert County	Grand totals 26

## RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 2, New Brunswick, for the Year 1908-09.

Kinds of Fish.		Quantities.	Price.	Value.	
			\$ cts.	\$ c	ets.
Smoked   Herring, salted   Fresh   Smoked   Mackerel, fresh   Salted   Smoked   Mackerel, fresh   Smoked   Mackerel, fresh   Smoked   Sm	brls. lb. "brls. cans. cwt. "brls.	5,040 151,470 2,491,000 1,952,000 339,800 259 2,685,000 3,137 80,118 380 3,550 8,230 8,500	0 15 4 50 0 01 0 02 0 12 15 00 0 30 5 00 4 50 10 00 3 00 2 50 0 25	756 681,615 24,910 39,040 40,776 3,885 805,500 15,685 360,531 3,800 10,650 20,575 2,125	00 00 00 00 00 00 00 00 00
Halibut Prout Shad Smetts. Alewives Bass. Eels Dysters	brls. lb. brls. lb.	145,050 112,350 2,677 5,316,000 6,200 205,600 2,936 19,080 32,310	0 10 0 10 10 00 0 07 4 00 0 10 10 00 6 00 4 00	14,505 11,235 26,770 372,120 24,800 20,560 29,360 114,480 129,240	00 00 00 00 00 00 00 00
Flounders. Frost fish Squid Coarse fish Fish oil. Fish as bait ## fertilizer Seal skins.	lb. "brls. galls. brls. "No.	557,000 2,069,000 825 9,580 26,700 102,140 259,632 84	0 03 0 03 4 00 2 00 0 30 1 50 0 50 1 25	16,710 62,070 3,300 19,160 8,010 153,210 129,816 100	00 00 00 00 00
Total				3,342,112	00

## RECAPIT ULATION

Of the Number and Value of Vessels, Boats, Nets, Traps, &c., engaged in the Fisheries in District No. 2, New Brunswick, in the Year 1908-09.

262 fishing vessels (3295 tons). 5,567 fishing boats. 730,700 fathoms gill nets 482 trawls. 277 bass nets 2,252 Smelt nets. 6,620 hand lines.  184 lobster canneries. 287,300 lobstr traps.  182 freezers and ice houses 429 fish and smoke houses	Values.	Total.
	\$ cts.  120,700 181,580 357,000 3,050 1,900 140,100 4,305  102,600 270,600	\$ ct:
47 piers and wharfs. 77 tugs and smacks 1,326 smelt shanties	84,600 51,500 41,200 25,800 26,450	229,55

STATEMENT of the number of persons employed in 1908:—

In vessels	1,060
In boats	10,623
In canneries and fish-houses	5,342
Total	17,025

# NEW BRUNSWICK—DISTRICT No. 3.

RETURN of the Number of Fisherman, Tonnage and Value of Tugs, Vessels and Boats, the Quantity and Value of all Fishing Materials and other fixtures employed in the Fishing Industry in the Inland Waters, Province of New Brunswick, for the Year 1908-09.

					9-
]		Number.		H01004700	1 -
	TOTAL VALUE.		cts.	7,650 00 12,530 00 5,575 00 9,600 00 1,400 00 6,403 00	43,158 00
Tee	ses.	Value.	Ø.	700 1450 350 2000	7800
Smoke, Ice	noH.	Number.		35 35 100 12:	267
	ps.	Value.	600	25	75
	Eel Traps.	Number:		25	75
	Lines.	Value.	<b>€</b>	540 100 1600 400 1128	4268
	Hand Lines.	Number.		2550 250 250 200 630	1780
		Value.	60	4500 6290 4000 3000 5000 75	18365
3IAL.	Gill Nets.	Fathoms.		14250 18250 10500 5000 1000	49100
Mate		Number.		475 770 550 200 50	2050
Fishing Material.		Меп.		200 376 100 250 70 445	1441
12	Boats.	Value.	<b>6/</b> 9	1900 4250 700 2500 500 1900	11750
		Number,		85 374 65 65 200 200 285	1059
	sels.	Men.		. : 60 60	5
	Tugs or ‡Vessels.	Value.	€€		900
	1gs 0]	Tonnage.		20	25
	+T	Number.		· · · · · · · · · · · · · · · · · · ·	2
	District.			1 Kings 2 Queens 3 Subbury 4 Your 5 Carleton 6 Victoria.	Totals
		Number,		128470	

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish in the District No. 3, Counties of Kings, Queens, Sunbury, York, Carleton and Victoria, Province of New Brunswick, for the Year 1908-09.

		Number.			
	Total	VALUE.	ets.	5,905 00 10,836 00 5,668 00 10,170 00 1,230 00 3,585 50	37,394 50
	.dañ ea	Mixed and coar	Brl.	75 75 75 100 25 112	437
		Caviare.	Lb.	300	300
		Perch,	Lb.	300 1000 2000	3300
	-	Fels.	Brl.	25 35 	20
		Sturgeon.	Lb.	2000	2000
JOINS.	7es.	Salted.	Brl.	100 330 1300	1730
Kinds of Fish and Fish Products.	Alewives.	Fresh and Smoked.	Lb.	8000 44200 4000 9000	65200
AND FIS	Pickerel.		Lb.	2000 25300 5400 10000	42700
F FISH		Bass.	Lb.	2000	2000
Kinds o		Trout.	Lb.	10000 2100 500 38000 8000 20100	78700
		Whitefish.	Lb.	3850	3850
	Shad.	Salted.	Brl.	22,27	130
		Fresh.	Lb;	5000 46400 2000 1500 1000	55900
		Salmon.	Lb.	10000 5750 1500 25000 1400 3370	47020
		Dispacer.		1 Kings. 2 Queens 3 Sunbury 4 Sunbury 5 Carleton 6 Victoria.	Totals

# RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 3, New Brunswick, for the Year 1908-09.

Kinds of Fish.	Quantity.	Price.	Value.
Salmon         Lb.           Shad, fresh         "           " salted         Brl.           Whitefish         Lb.           Prout.         "           Bass         "           Pickerel         "           Alewives, fresh and smoked         "           " salted         Brl.           Sturgeon         Lb.           Eels         Brl.           Perch         Lb.           Mixed and coarse fish         Brl.           Fish products. Caviare         Lb.	47,020 55,900 130 3,850 5,000 42,700 5,000 42,700 5,000 43,730 5,000 43,300 437 300	\$ cts.  0 20 0 10 12 00 0 15 0 10 0 08 0 07 2 00 0 08 0 07 2 00 0 85	\$ cts.  9,404 00 5,590 00 1,560 00 577 50 7,870 00 2,989 00 1,304 00 5,190 00 231 00 274 00 255 00

## RECAPITULATION

Of the Number and Value of Vessels, Boats, Nets, Traps, &c., used in the Fisheries in District No. 3, New Brunswick, in the Year 1908-09.

Material.	Number.	Value.
Men employed Vessels (tonnage 25) + ‡. Boats Gill nets (fathoms 49,100). Hand lines Eel traps Smoke and ice houses and building used exclusively by fishermen.	2,050 1,780 75 267	\$ cts. 900 00 11,750 00 18,365 00 4,268 00 75 00 7,800 00
Total		43,158 00

# RECAPITULATION.

OF the Yield and Value of the Fisheries of the whole Province of New Brunswick for the year 1908-09.

Kinds of Fish.	Quantities.	Value.	Total Value.
		\$ ets.	\$ ets
Salmon, fresh	1,668,160 11,540 1,920	252,575 00 2,056 00 288 00	254,919 00
Herring, salted. Brls.  " fresh. Lb.  " smoked and kippered. "  " boneless. "	154,030 2,804,100 3,461,000 103,000	693,135 00 28,041 00 92,255 00 10,300 00	ŕ
Mackerel, fresh"  " saltedBrls.	339,800 259	40,776 00 3,885 00	823,731 00
Lobster, preserved cans Lb.  "fresh or alive Cwt.	2,716,968 10,317	815,090 00 87,485 00	44,661 00
Cod, dried " " fresh Lb, " tongues and sounds Brls.	84,757 386,800 380	381,406 50 15,472 00 3,800 00	902,575 00
Haddock, fresh Lb- dried Cwt. smoked and canned Lb.	1,547,700 4,546 218,900	46,431 00 13,638 00 14,094 00	400,678 50 74,163 00
Hake, dried	47,630 36,390	119,075 00 9,097 £0	
Pollock Cwt. Halibut Lb. Trout "Shad, fresh and salted Brls. Smelts Lb. Alewives fresh and salted Brls.	30,565 156,050 191,050 3,699 5,422,500		128,172 50 76,412 50 15,605 00 19,105 00 41,457 50 380,640 00
Bass         Lb.           Eels         Brls.           Whitefish         Lb.           Pickerel         "	18,406 210,600 3,306 3,850 42,700		82,044 00 20,960 00 33,060 00 577 50 2,989 00
Sturgeon. " " caviare. "	5,000 300	450 00 255 00	705 00
Sardines Brls. Cans	286,254 4,899,000 537,000	429,381 00 244,950 00	674,331 00 16,710 00
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2,069,000 19,080 46,248 594,000 8,000	151,733 00 59,400 00 4,000 00	62,070 00 114,480 00
Squid. Brls. Coarse fish, mixed. "Fish oil. "Galls	1,120		215,133 00 4,480 00 20,034 00 17,190 00
as bait   Bris.     fertilizer         Seal skins   Lb.	262,587 84 153,000		182,482 50 132,771 00 100 00 9,180 00
Cockles    Brls.      Percn    Lb.	530 3,300		2,650 00
Total Value for 1908 1907			
Decrease			546,266 00

# RECAPITULATION

Or the Number of Fishing Crafts, Nets, &c., in the whole Province of New Brunswick, for the Year 1908-09.

Articles.	Number.	Value.	Total Value
		\$ cts.	\$ cts
Fishing vessels, (5,169 tons) Fishing boats	368 9,025	188,900 344,060	
Fathoms of gill nets. Fathoms of seines Smelts nets. Bass nets Weirs Trawls Eels Traps Hand lines and rod and lines	1,062,140 13,640 2,263 277 408 1,084 75 11,492	415,465 28,765 140,200 1,900 212,500 11,215 75 10,903	552,960
Lobster canneries	188 311,815	114,100 294,160	821,023
Ice houses and freezers. Fish and smoke houses Fishing piers and wharfs. Fishing tugs and smacks Smelt shanties. Fish and clam factories. Pile drivers and scows	201 1,373 359 108 1,326 10 163	93,250 214,860 161,750 46,360 26,450 53,500 7,150	603,320
Total			2,365,563
Number of men engaged in the Fisheries of New Bruns Men in vessels	• • • • • •	1,427 14,173 5,819	-
Total		21,419	
Decrease in total value of fish landed		\$546,9 3, \$33,	240

# APPENDIX No. 5.

# PRINCE EDWARD ISLAND.

REPORT ON THE FISHERIES OF THE PROVINCE BY INSPECTOR J. A MATHESON.

To the Superintendent of Fisheries, Ottawa.

SIR,—I have the honour to submit my annual report of the fisheries of the province of Prince Edward Island for the year 1908, together with tabulated statistics, showing the catch in detail in each county and locality, also synopsis of reports of overseers for the past year, with references to the principal features of the season's operations.

#### LOBSTERS.

I have to report an increase of 258,955 lb., which goes to show there is no falling off in this fishery.

The following figures show the average number of one pound cans per trap for the past ten years, viz.:

1899 1900	$8 - \frac{1}{2}$
1900	$7 - \frac{5}{16}$
1901	$7 - \frac{7}{16}$
1902	$8-\frac{1}{2}$
1903	$9 - \frac{3}{16}$
1904	$8 - \frac{7}{16}$
$1905 \dots	$7 - \frac{9}{1.6}$
1906	$7 - \frac{6}{15}$
1907	8-1
1908	8-13

From the above average I see no cause for any great alarm, as the catch at the present time is equal to the demand, and should it be increased, no doubt it would have a tendency to decrease the price to the fishermen and shippers, which is not the desire of either, to go back to the low price of four dollars per case, which existed when the catch was greater than the demand.

#### OYSTERS.

I have to report an increase in this industry over 1907 of 1,530 barrels.

In Grand River I fear the quahaugh fishing has materially interferred with the

oyster fishing, as the fishermen keep encroaching on, and destroying the beds.

I have prevented the fishing of quahaugs in the upper part of Grand River, as I am in hopes it may be the means of reviving the oyster industry in that river. Overfishing induced by the high price of oysters is the great cause of the scarcity of this fish, and I would recommend that Richmond Bay be divided into three sections, one section to be fished each year in succession, which would allow one section rest every third year.

I am of the opinion that a change like this would eventually help to preserve this

valuable fishery in Richmond bay.

Last spring two private parties in Summerside imported a few barrels of small oysters from the United States, and they report satisfactory results, and if the department would import a trial shipment and have Captain Kemp, our oyster expert, have them put on some of our beds, (which are becoming depleted), in about two years it would be demonstrated what the results would be, and if found successful, the department might assist in restoring the old beds. There is generally a quantity of small oysters on the rocks at Curtain Island, that might be picked and used to assist the old beds, or building new ones. If Captain Kemp were provided with more assistance and two or three small boats, a good work might be accomplished in restoring this industry, and prevent the destruction of those small oysters during the winter months by the ice.

#### COD.

I am pleased to report an increase in the cod fishery of 7,166 quintals over last season, but low prices were received by fishermen.

#### HAKE.

In this fishery I have to report a decrease of about ten per cent from 1907.

#### HERRING.

In salted there was a falling off of about 50 per cent from 1907, but an increase in quantity of herring as bait of 9,119 barrels.

#### QUAHAUGS.

There was a large decrease in the quantity of quahaugs from 1907 a falling off of 36,814 bags. This industry is becoming exhausted and the prices paid were much lower than in 1907.

A great deal of trouble was experienced to control quahaug fishermen from infringing on oyster areas, and much injury must have been done to the oyster beds from the settling of sediment on them, caused by quahaug fishermen, and on the whole it would be a benefit to oyster-fishermen if the quahaug fishing would altogether cease.

# Laprim Laprim

#### SMELTS.

Smelt fishing was about equal to that of last season; was not remunerative owing to weather being usually mild, which prevented the shippers from getting their fish to the market in good condition.

## SYNOPSES OF OVERSEERS' REPORTS.

Overseer McCormack, Kings county, reports as follows:

Lobsters were first packed on the south side on the 28th April, on the north side about ten days later, with fishing very good all through the season, it being a calm summer the result was a large pack, and scarcely any traps destroyed, as on former years.

Herring struck in about the first of May very plentiful, fishermen having abundance of bait all through the season, and a number of bankers got bait at Georgetown and a few at Souris. The fall school were scarce from East Point to Georgetown, but from there to High Bank quite a number of barrels were caught, some going to Pictou and vicinity, the balance for local use.

Cod struck in about May 26th, large fish, but fell off in a few weeks, resulting in

a decrease of about 1,000 quintals from 1907.

Hake came in early about July 20th; good fishing for about four weeks, then slacked off considerably and ran small in size. Fresh bait for Hake was scarce in August and September, and resulted in a small catch. Had bait been more plentiful, no doubt the catch would have been greater.

Dogfish,—Very few complaints were made about dogfish this year. A small school struck here in August but remained only a few days, and all disappeared as suddenly

as they came.

Violations,—Only two cases of illegal lobster fishing came to my notice, as usual in the southern part of the county. Proceedings were taken against one, and owing to the nature of the evidence, I settled the case by the parties paying all the expenses. The other case, I could not get sufficient evidence to warrant proceedings.

Salmon are taken only at St. Peter's, and were scarce last season.

Trout about the same as usual.

Overseer Davison, Prince county, reports as follows:

There is a great decrease in quahaugs owing in a certain measure to Grand River being closed and also no market for them. Quahaugs are becoming scarce. The fishermen did not fish the whole season.

There is an increase in the cod fishery in this county, owing to the favourable

season and more fishermen engaged in this fishing.

The smelts were scarce and of poor quality in this county last season.

More lobsters were caught last season, one reason being that more gear was used. The catch was poor in the late season on the south side.

I am, sir,

Your obedient servant,

J. A. MATHESON,

Inspector of Fisheries.

9-10 EDWARD VII., A. 1910

	5 1	Number.		1264	00	9 00	50 10 9 8 7	1 :	1 6
WHOLE	GEAR.	Value.	<b>69</b>	19400 8160 23675 27660	32450	30000	23500 15830 11975 8350		100
	Tugs, SS. and Smacks.	Value.	<b>69</b>	1500	:	1200		:	0000
ED		Number.		8 :47	:	3	: : : :	. 15	
S. Us	Piers and Wharfs	Value.	6€	400 150 200 400	:	1000	5000	:	
FIXTURES FISHERIES		Number.		20241	:		T :::	11	-
IXTU	Smoke & Fish Houses	Value.	€₽	100 100 100 450	50	150	150 150 150 100	:	
H. F.	Smoke & Fish Houses	Number.		10 10	70	15	5005	105	-
Отнев Fixturs Used in Fisheries.	Freezers and Ice Houses.	Value.	69	2000	:	:			
		Number.		61 1 40 02	 	72	130 92 71 37	1 1	-
	n nnaries.	ri bersons employed i			129		-	841	
PLANT.		Value.	₩	7000 6000 4000 4000 8000 12000 7900 12000	34000 20000	14000 10000	12000 8000 6000 3000	::	
Lobster Plant.	Traps.	Number.					16000 9500 7000 3500	130000	-
Log	Canner-	.9ulaV	60	3000 2500 6500 5000	2000	4000	7000 5000 4000 2500		Ì
	Cam	Number.		40100		4	P-1040	50	1
		-Value.	69	200 50 100 150	150 12	200	150 150 75 100	1	1
IALS.	Hand Lines.	Number.		200 100 150	150	200	150 150 75 100	1325	İ
TER	elt is.	Value,	6/9	100 160 160 160	100	150	800		
MA	Smelt nets.	Number.		2000	20	30	10.00	206	-
3 OR	718.	Value.	69	500	150	100 1000	400 100 400	1 :	1
GEA1	Trawls.	Number.		500	15	100	04 01 04	338	-
Fishing gear or Materials.	zử.	· Salue.	69	2000 600 3000 4000	3000	4000	1500 1000 1500		-
FI	Oil Nets.	Esthoms.		4500 1000 6000 7500	0009	8000	2000 1200 2000	40200	1
	0	Number.		300	300	200	200 200 150 200	2700	
ATS		Men.		120 52 68 68 150	150	80	90 100 55 55	950	-
s and Boats	Boats.	Value.	69	1000 600 1000 2000	2000	800	1000 1000 600 500	1:	
TES A		Number.		271	94	45	45 55 80 80 80	544	1
ESSE		Total fishermen.		2500 23 :	:	7500 48	: : : :	. 84	
Fishing Vessel	Vessels.	Value.	₩		:			1 :	j
SHII	Ve	Tonnage.		73	:	12 253	: : : :	374	ļ
F		Number.		9 : :4				22	
		DISTRICTS.	Kings County.	Souris and Red Point  2 Bay Fortune  3 Annandale  4 Georgetown	Lurray Har- bour, North		7 Morell and St. Peters 8 Naufrage 9 North Lake 10 East Lake	Totals	

RETURN showing the kinds and quantities of Fish Products in the County of Kings, Province of Prince Edward Island, for the year 1908.

	TOTAL VALUE OF ALL FISH.	& cts.	41,112 17,448 60 17,448 60 55,236 00 66,513 20 42,172 00 66,972 00 66,972 00 66,973 00 17,988 80		429,144 80
	Seal, skins, number.		1000 1150	400	1600
	Fish as bait, brls.	~	1200 1500 3500 2500 1000 1000 1000	15300	22950
	Fish oil, gall.		1000 50 1000 1000 500 1000 200 200	3550	400 1065
	Coarse and mixed fish, bris.		100 100 100 100 100 100 100	200	400
	Clams, brls.			225	006
	Eels, bris.		200110000000000000000000000000000000000	105	1050
	Alewives or gaspereau, brls.	Name of Parties		100	400
	Smelts, lb.		4000 10000 4000 6000 24000 10000 56000 10000	7500 129000	5160
	Trout, lb.		1000 1000 1000 1000 1000 1000 1000	7500	750
FISH.	Hake, sounds, lb.		4000 4440 1000 1000 4000 1000 60 1000 400	11300	5650
KIND OF FISH.	Hake, dried, cwt.		220 220 500 500 500 500 500 500 500 500	5650	14125
M	Haddock, dried, cwt.		150	200	345 1500
	Haddock, fresh, lb.		2000 1000 1000 2000 1000 1000 500 500	11500	3.45
	Cod, dried, cwr.		250 250 250 250 250 800 800 500 300	2500	24750
	Lobsters, preserved in		80640 42912 123168 138720 195744 80880 181144 125040 108912 42960	330 1120416	336124 80
	Mackerel, salted, brls.		110 122 30 30 100 100 100 40	330	4950
	Herring, smoked, lb.		45000	45000	006
	Herring, salted, brls.		100 100 100 100 100 100 100 100	1350	450 6075
	Salmon, fresh, lb.		2500	3000 1350	450
	District.	Kings County.	1 Souris and Red Point. 2 Bay Fortune 3 Annandale 4 Georgetown. 5 Murray Harbour, North 6 Murray Harbour, South 7 Morell and St. Peters. 8 Naufrage 9 North Lake.	Totals	Values

9-10 EDWARD VII., A. 1910

Return showing the Number, Tonnage and Value of Vessels and Boats and the Industry in the County of Queens, Province of

		F	'ishii	ng V	ESSEL	S AN	D BOAT	s.		I	rishino	G GE	AR C	R M.	ATER	IALS.	
	Districts.		Ve	ssels.			Boats.			Gill-net	ts.	Tra		Trav	wls.	Sm	
Number.	Districts.	Number.	Tonnage.	Value.	Total fisher- men.	Number.	Value.	Men.	Nunber.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
	Queens County.			\$			\$				\$		\$				\$
2 3 4 5 6 7 8 9	Tracadie New London Point Prim Rustico Wheatley River Pownall Charlottetown Crapaud Lot 65 Bays and Rivers	5	30	1000	27	34	2000 1800 2600 200 500 750 800 1600	80 60 156		1000	150 500	10		15	100	200 20 16 4 3 9 4 19	160 120 360 160 570
	Totals	7	115		48	651		1273	930	19000		10		65		309	
	Values			2650			15350				13900		40	ļ	450		4783

Return showing the kinds and quantities of Fish and Fish Products in the County of

						Kı	NDS OF	Fish.						
Number.	Districts.	Salmon, fresh, lb.	Salmon, preserved in cans, 1b.	Herring, salted, brls.	Herring, fresh, brls.	Mackerel, fresh, lb.	Mackerel, salted, lb.	198	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lb.	Haddock, dried, cwt.	Hake, dried, cwt.
2	Queens County.  Tracadie New London Point Prim Rustico. Wheatley River Pownall Charlottetown.		125	1240 200 160 3000	4020 2000 1000 20000	6000 500	300	194640 1(1952 80448 149760 13440	300 75	2200 800 90 5000 900	16	5500 200 12000	···i0	100
8 9 10	CrapaudLot 65Bays and Rivers				80000			54000		1200				
	Totals	250	125	4600	107020	28800	650	647568	510	10190	76			
	Values	37.50	18.75	20700	1070	3456	9750	194270	3570	45855	760	531	3090	550

Quantity and Value of all Fishing Material and other Fixtures used in the Fishing Prince Edward Island, for the Year 1908.

		ļ	Lobs	ter P	LANT.			Отне	R FIXT	URES U	SED I	n Fish	ERIES.		WHOLE	
Ha		Can	neries	Tra	ips.	yed in	aı	ezers ad ouses.	aı	oke nd nouses.		ers and harfs.	Steam	ers and	FISHING GEAR.	
Number.	Value.	Number.	Value.	Number.	Value.	Persons employed canneries.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Number.
	\$		\$	,	\$					\$				\$	\$	
200 200 50 400 50  100 100 50 100 1250	100 100 25 200 25  50 50 25 50  625	4 7 222 4  1  5 	4100 5495 6200 1000  3450 4075	16700 17400 2400 11350 9000  83960	12300 9620 12100 2000  7975 4400	92 86 108  14  62 49  561	1	1000	12	1200	9 7 15 10 1  8 5 	250 350 300 1500 25 160 100		275 400 80 900  2505	30,458 29,100 18,280 27,560 685 4,545 1,160 12,745 12,120 450	2 3 4 5 6 7 8 9 10

# Queens, Province of Prince Edward Island, for the Year of 1908—Continued.

				К	INDS O	F Fish	[•							
Hake, sounds, lb.	Trout, 1b.	Smelts, lb.	Alewives or Gaspareau, brls.	Eels, brls,	Oysters, brls.	Clams, brls.	Squid, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Quahaugs, bags.	TOTAL VALUE OF AL FISH.	L	Nmunbor
				1								. \$	cts.	
20 1000 150	1600 1000 700 2000 1000 1000 500 500 5000	50000	250	185 1 10 20	2350 500 800  25 40 1200 100	75 5 15 15 15 	40	800 800 500 50	2366 1800 2050 2540 530 1420 1500	25 90 400 220 300 450 450	250 500 300 2000 800	106,733 46,385 39,630 95,788 4,265 5,737 1,444 18,818 38,625 6,450	60 40 00 00 00 00 40 00	
1170	13300	421100	250	366	4565	135	70	2150	12206	1935	3850			
585	1330	16844	1000	3660	27390	540	280	645	18309	1935	7700	363,876	85	

9-10 EDWARD VII., A. 1910

Return showing the Number, Tonnage and Value of Vessels and Boats and the Quan in the County of Prince, Province of Prince

			Fisi	HING V	ESSE	LS AN	d Boa	TS.					F	'ISHING	G	EAR
	Districts.		V	essels.			Boats.		G	ill-nets	٠		Seir	ies.		rap- ets.
Number.	DISTRICIS.	Number.	Tonnage.	Value.	Total Fisherman.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Miminegash. Alberton. Narrows, Lot 11. Ellerslie, Lot 12. Bideford. Grand River. Malpeque. Richmond Bay Roxbury, Lot 6. Fifteen Point. Brae.	144	15 105	700 2575 500	3 32	60 29 57 30 19 27 35 62 27 31 108 8 15 13 108 8 17 36 37	\$ 4440 1990 2650 1733 1020 1425 1700 633 800 995 350 1260 6530 400 870 270 885 1100 1570 555	122 54 89 44 51 37 70 0 58 29 64 30 26 216 16 30 30 30 12 26 64 37	54 57 90 181 432 174 350 75 105 336 45 500 305 60 48 60 14 40 92 20	1350 952 2280 3620 6480 2450) 2600) 390 1250 5796 675 6000 4649 1200 280 280 824 2200	\$ 270 485 1450 1488 1620 550 1000 168 275 5622 180 1500 1248 250 280 300 1033 264 414 50	1				\$ 3000
	Totals		138	3775	39	653	30676	1105	3038	45496	12457		570	1400	1	3000

tity and Value of all Fishing Materials and other Fixture used in the Fishing Industry Edward Island, for the Year 1908.

OR I	Мат	ERI	ALS.				Lob	STER P	LANT.		гО	HER F	IXTUF	RES U	SEI	) IN FI	зні	ERIES.	Whole Fishing Gear.	
Tra	wls.		nelt ets.	Ha Lir			anne- ries.	Tra		loyed in	an	d Ice		Fish		Piers and harfs.	Ste	Fugs, eamers Sm'cks	WHOLE	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons employed Canneries.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value,	Value,	Number.
	\$		\$		\$		\$		\$			\$		\$		\$		\$	\$	
27 11 33 63	233 145 352 630	3	45 1280 130 105 25 25 300 100 70 100	80 24 30 89 32  50  20	15	4 3 4 5 7 3 3	3300 5300 8750 4000 1800 2300 600 480 2100 3000 5750 400 2000 3900 1900	11200 4075 18100 10375 7110 5000 6000 2725 5020 8000 25590 1500 4500 775 5500 12200 8689	5600 3775 9500 8600 7110 3800 6000  1545 3520 6000  19975 1500 4500 7000	134	1	700		50	1	700		1500 2400	17190 12895 22525 17674 16555 82055 10030 801 2755 7717 9530 2800 33503 8503 575, 2188 7359 11454	22 34 45 67 78 99 111 112 113 113 114 115 115 115 115 115 115 115 115 115
134		79		355		82		136359		998	2		2		4		6			
	1360	-	2480		263		47830		98320			1200		50		2900		3900	209611	

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Return showing the Kinds and Quantities of Fish and Fish Products in the

								I	ZINDS OF
Number.	Fishing Districts.	Herring, salted, brls.	Herring, fresh, lb.	Herring, smoked, lb.	Mackerel, salted, brls.	Lobsters, preserved in cans, lb.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Haddock, fresh, lb.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Skinner's Pond. Miminegash Alberton Narrows, Lot 11 Ellerslie, Lot 12 Bideford Grand River Malpeque Richmond Bay Roxbury, Lot 6 Fifteen Point Brae. West Point Travellers Rest. Summerside.	10000 1755 255 400 5000 52 	3000 10000 2200 3400 1500 20100	500	550	218552 44784 103032 89808 160224 51696 53280 24288 43420 78080 205920 21696 26736 13440 97920 97920 71664	20	1200 2200 3500 493 380 139 200  100 647 1010	2150
	Totals	10611	20100	10		399138	140	44455.50	64.50

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County of Prince, Province of Prince Edward Island, for the Year 1908.

Fish	•									,					
Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sound, lb.	Trout, lb.	Smelts, lb.	Alewives or gaspereau, brls.	Eels, brls.	Oysters, brls.	Quahaugs, bags.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	TOTAL VALUE OF ALL FISH.	Number.
		1												\$ cts.	
220	1000° 2000	2000 4000	,								600 780	6000 616 980	112	88,145 60 33,802 70 49,683 10	2
	200 692	400 1384	350	8500		4			15	40	$   \begin{array}{c c}     220 \\     290   \end{array} $	912		49,683 10 34,657 90	
	10	20		11(000								2430		63,452 20	
10	25	12	300 400	8000 8000		5	303 1000				100	700 1000		19,586 30 24,922 50	
10	Δυ	1.2	400	6000			1470	3084						15,363 00	
				14200			200	300			80	110		10,719 40 25,853 50	
			200	18000 6000			1000 525	400 400			00	750 600		28,514 00	
	40	80	500	6000			1000				50			11,627 50	
			200	2000 40800	12		655	2174				6685 900		72,883 50 17,846 80	
••••			300 600	40800	12		099	2114				805		9,495 30	
				1000		5	420	1200				300		5,505 00	
			700	14000 4500			14 20	80				175 810	60	5,330 50 10,885 00	
				10400			20					1135	,.	31,494 50	
			300	10000		25	300	300				700		25,834 20	
230	3967	7896	3650	267400	12	39	6907	7938	15	40	2120	25608	172		
690	9917.50	3948	365	10696	48	390	41442	15876	60	80	636	38412	172	585,602 50	

9-10 EDWARD VII., A. 1910

RECAPITULATION by Counties, showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry, in the Province of Prince Edward Island, for the Year 1908.

	Number.	-000				Number.	1	1000	
and-	Value,	# 1325 263 625	2213	DLE	ING V.B.			001,000 009,611 37,103	547,714
HH	Number.	1325 355 31250	3 2930	WHO	GEZ	Value,	69	001	1 200
nelt-	.eulsV	184 2480 478	9108		pur	*anto		4300 3900 2505	10705
Sn	Number	206 79 309	594		lugs, mers a	- AufaV	99		
awls.	Value.	\$ 3380 4 1360 5 450	2 2190	ES.	Stear	Number.		3	29
	Number.			SHERI	rfs.	v silue,	69	2650 2900 2885	8435
Trap nets.		101:	11 304	R E	Piers Wha			니쇼꼬	100
	.enlaV	\$ 1400	1400	SED 1	and	Number.		H 10	
Seines	-smonts4		1	RES D	ses.	·9nlaV	60	1400 50 1200	2650
	Number.	: :	1	UXXI	and and -hou			20.00.00	
	Value.		1	HER F	Fish	Number.			119
ill-nets.	Estpoms,	40200 45496 19000	104696	OT	ezers and touses.	.eul.eV	60	2000 1200 1000	4200
	Number.	2700 3038 930	8999		Fre Ice-h	Number.		-0-	4
, or	Men.	950 1105 1273	3328		bjoked	mə snosrə¶ sənnsƏ ni		841 998 561	2400
Boat	Value.			NT.		Value.	€€	93000 98320 61395	252715
	Number.		1848	PLA	raps	*		0.60	i .
	Men.			STER	T	Number.		1363E 1363E 8396	350319
ssels.	Value.		18425	Lob	es e			5500 830 320	124650
V <sub>e</sub>	.эзаппоТ		627		nneri	-enlsV	<b>€</b> €		ł.
	Number.	22 6	35		C. C.	Number.		22.22	183
DISTRICTS.	Jaguna	1 Kings. 2 Prince. 3 Queens	Totals		Districts.		Counties.	1 Kings 2 Prince 3 Queens	Totals
	Vessels. Boats. (Fill-nets. Seines. Trap. Trawls. Smelt. Hand. Ines.	Mumber.  Mumber.  Mumber.  Mumber.  Walue.   Districts.   Dis	Districts.   Districts.   Districts.   Boats.   Gill-nets.   Seines.   Trap-   Trawls.   Smelt-   Handler.   Innee   Lines.   Trap-   Trawls.   Smelt-   Lines.   L	Districts.   Districts.   Districts.   Boats.   Gill-nets.   Gill-ne	Counties   Counties	Number:   Numb	Number:   Numb	Districts.   Counties.   Cou	

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RECAPITULATION by Counties showing the Kinds and Quantities of Fish and Fish Products in the Province of Prince Edward Island, for the Year 1908.

Hake, sounds, lb.	7500 3650 13300	24450		3	85.50	15
Hake, sounds, lb.			Total Value of All. Fish.		429,144 585,602 363,876	1,378,624
	11300 7896 1170	20366			300	1,37
Hake, dried, cwt.	5650 3967 220	9837		Clams in cases, 48	400	400
Haddock, dried, cwt.	230	1760		prls.	1935	2107
Haddock, fresh, lb.	11500 2150 17700	3135(			:	53114
Cod, tongues and sounds, brls.	92	26		stad 4,000 dail		7820
Cod, dried, cwt.	5500 9879 10190	25569	TS.	Fish cil, galls.		
Lobsters, fresh in shell, cwt.	200	530	Produc	Coarse and mixed fish that	200.	240
Lobsters, preserv'd in cans, lb.	1120416 1330460 647568	3098444	FISH	Squid, biugs	15 70	82
Mackerel, salted,	330 550 650	1530	SH AND	esseq 'ssnæyen'	7938	11788
Mackerel, fresh, lb.	28800	28800	S OF E	Clams, brls.	225	360
Herring, smoked,	45000	45500	KIND	Oysters, brls.	6907 4565	11472
Herring, fresh, lb.	20100	127120		Hela, brla.	105 39 366	510
Herring, salted, brls.	1350 2358 4600	8308		Alewives of Cass-	100	362
Salmon, preserved in cans, lb.	125	125		Soft to sominately	3000 1400 1100	817500
Salmon, fresh, lb.	3000	3250		Smelts, lb.	128 267 421	817
		:				
Districts.		Totals	DISTRICTS.		Counties.	Totals
	Salmon, fresh, lb. Salmon, fresh, lb. Salmon, preserved in cans, lb. Herring, salted, lb. Mackerel, fresh, lb. Mackerel, salted, lb. Lobsters, preserv'd in cans, lb. Lobsters, fresh in shell, cwt. Cod, tongues and sounds, brls. Cod, dried, cwt.	250 Salmon, fresh, lb.  Salmon, preserved in cans, lb.  Herring, salted, brls.  250 Herring, fresh, lb.  Herring, smoked, lb.  Herring, smoked, lb.  Herring, smoked, lb.  Mackerel, salted, brls.  Mackerel, salted, lb.  Mackerel, salted, brls.  Dobsters, fresh in shell, cwt.  Cod, tongues and shell, cwt.  Cod, tongues and shell, cwt.  Cod, tongues and shell, lb.  Cod, tongues and shell, lb.  Cod, tongues and shell, cwt.  Cod, tongues and shell, lb.   Counties	Kings  Counties.  Totals.  Wings  Rings  Rings  Prince  2350  Counties.  Herring, tresh, lb.  Herring, tresh, lb.  Mackerel, tresh, lb.  Mackerel, tresh, lb.  Cod, tongues and sounds, bris.   Country   Coun	Prince   P		

# RECAPITULATION

Showing Yield and Value of the different Fisheries in the Province of Prince Edward Island, during the Year 1908.

	1	1	1
Kinds of Fish.	Quantity.	Price.	Value.
Salmon, fresh         lb.           " preserved in cans         lb;           Herring, salted         brls.           " fresh         lb.           " smoked         lb.           Mackerel, fresh         lb.           " salted         brls.           Lobsters, cans         lb.           " fresh in shell         cwt.           Cod, dried         cwt.           Tongues and sounds         brls.           Haddock, fresh         lb.           " dried         cwt.           Hake, dried         cwt.           Hake, sounds         lb.           Trout         lb.	3,250 125 8,308 127,120 45,500 28,800 1,530 3,098,444 530 25,569 76 31,350 1,760 9,837 20,366 24,450	\$ cts.  0 15 0 15 4 50 0 01 0 02 0 12 15 00 0 30 7 00 4 50 10 00 0 33 0 00 2 50 0 50 0 10	
Smelts         lb           Alewives or Gaspereaux         brls.           Eels         brls.           Oysters         brls.           Clams, in cases         cases           Clams         brls.           Quahaugs         bags.           Squid         brls.           Coarse and mixed fish         brls.           Fish oil         gals.           Fish as bait         brls.           Fish as manure         brls.	817,500 362 510 11,472 400 360 11,788 85 240 7,820 53,114 2,107	0 04 4 00 10 00 6 00 4 00 2 00 4 60 2 00 0 30 1 50 1 00	2,443 00 32,700 00 1,448 00 5,100 00 68,832 00 1,600 00 1,440 00 23,576 00 480 00 2,346 00 79,671 00 2,107 00
Total	•••••		1,378,624 1

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## RECAPITULATION

Showing the Number and Value of Vessels, Boats, Nets, Lobster Canneries, Traps, &c., used in Fisheries of the Province of Prince Edward Island, for the Year 1908.

. $Articles.$	Value.	Total.
	\$ ets.	\$ cts
35 fishing vessels (627 tons)	18,425	
1.848 fishing boats	56,526 48,457	
6,668 gill-nets (104,696 fathoms)	1,400	
11 trap-nets	3,040   5,190	
537 trawls. 594 smelt-nets	9,108	
2,930 hand lines	2,213	144,35
183 lobster canneries	124,650	. 211,00
350,319 lobster traps	252,715	377,30
4 freezers and ice-houses	4,200	
119 smoke and fish houses	2,650 8,435	
29 steamers and smacks	10,705	25,9
	_	
Total		547,7
Number of persons employed in the fisheries of Prince Edward  Men in fishing vessels	d Island :— 171 3,328	-
Persons in lobster canneries	2,400	
Total	5,899	
Decrease in number of workers		50
Increase in value of gear used	\$56,6	
Deman in releas of fish landed	\$114.071.	bb

Decrease in value of fish landed ..... \$114,071.55

## APPENDIX No. 6.

## PROVINCE OF QUEBEC.

GULF DIVISION, QUEBEC, BY INSPECTOR WM. WAKEHAM, M.D., GASPÉ BASIN.

INLAND DISTRICTS, BY INSPECTOR JOSEPH RIENDEAU, OF MONTREAL.

Gaspé. 1909.

To the Superintendent of Fisheries, Ottawa.

SIR,—I beg to submit the annual statement giving the return of the yield, and value of the Fisheries of the Gulf Division, province of Quebec. for the year just closed, together with a statement showing the number of men employed in the fishery, together with the amount of capital invested, &c.

The return shows a slight decrease in the value as compared with the previous year. Dealing with the leading divisions of the fishery in detail it will be shown that there was a very considerable increase in the volume of the salmon net fishing on the north coast of the gulf—while the fisheries for mackerel, lobsters, and cod show a diminution.

The prices of all fish which had been abnormally high during 1907, fell off greatly, and large quantities of cod and lobsters are being held for an improved market, and the chances, are that prices for the coming season will also be low. Except on the Labrador, fishermen are not seriously affected by these low prices owing to the enormous demand for labour offered by the many mills now in operation along the coast, and the extensive railway works now being prosecuted along the Gaspe shore, and in various other localities easily reached from the coast.

#### HERRING.

Spring herring were as abundant as ever. There does not seem to be the slightest diminution in the volume of spring herring, from year to year, in spite of the apparently great drains made on the fish at the various points where they strike the coast in April and May. Herring were fairly constant throughout the season—though the cure of fat fall herring was not as considerable as usual.

#### Cop.

Cod fishing began about the 20th May, and was fairly good along the coast of Gaspé county, the yield being above that of 1907—but in Saguenay and Bonaventure counties there was a considerable falling off—this was I think altogether due to the absence of the usual fall fishing. The demand for labour was so great, that fishermen in most places hauled up their boats, and abandoned the fishing with the end of August. This condition will continue, and we are not likely ever to have much fall fishing in the future. The class of hardy men who devoted themselves entirely to the fishing, from the early spring to late in the fall, has passed—the young men of the present will not endure hardships which their fathers were accustomed to, and made nothing of.

In spite of the great outcry now being made about the use of steam in the fishery, and the change in the manner of fishing which naturally follows, it is my firm belief that in a very few years we will see the same methods employed on our Atlantic coast, and in the Gulf of St. Lawrence, as are now almost universally followed in the North Sea. The very same outcry that we are hearing now, was made by the line fishermen of the British Islands when trawls were first used about the British coasts. Royal Commissions were appointed to investigate, and on these were the ablest scientists of the day. Their reports were not unfavourable—the result is that to-day we find fully one thousand steam trawlers operating from British fishing centres while almost as many more are fitted out from French and Dutch ports. Speaking for my own coasts, it will never be possible for trawling to interfere with the line fishermen, as the inshore bottoms are too rough-but experience is certain to show that there are many banks and bottoms off shore, not now frequented by the line fishermen, where the trawl will work. The use of the trawl will also show that there are many bottom fish-plaice, brill-flounder, &c., which are only taken by the trawl- these fishes are not caught by the line fishermen, our people are not accustomed to their use-our markets do not know them, and actually refuse them, but with the introduction of the trawl all this will be changed. As pan fish these flat fishes are infinitely better than cod or haddock.

I do not think one requires to be much of a prophet to say—that whereas we are to day raising a hue and cry against the use of the trawl, and passing regulations prohibiting, as far as we can, its use—in less than twenty years from this, we will be sending our Hydrographers to locate the most favourable bottoms, and prepare charts for the use of steam trawlers fitted out from Halifax and Lunenburg. It is rather rich to find the U.S. fishermen who have ruined the mackerel fishing by the use of purse seines before the spawning season of the mackerel—now complaining about the use of trawls by the French fishermen.

#### LOBSTERS.

The lobster fishing shows everywhere a falling off, not quite so many canneries were operated, and naturally the number of hands employed in these, has been curtailed, but the returns show an increased number of traps fished. I note that a committee of parliament is now taking evidence on the subject of this fishery, and I trust that the result may lead to the adoption of such regulations as may avert, or arrest, its further decrease. My personal feeling is that the regulations to be effective, and easy of enforcement should be as general and as simple as possible.

#### SALMON.

As before stated this fishery shows a considerable increase, and as usual this is on the north coast of the gulf, their being a decrease in Gaspe and Bonaventure. On some parts of the north coast the catches were phenomenal, and it certainly begins to look as though the salmon were avoiding the south shore, and flocking towards the north—if this is the case, we must modify our theory that salmon always return to the rivers in which they were born.

#### MACKEREL.

The returns from the Magdalen Islands, now the only point in the gulf division where mackerel are taken show a slight decrease in the catch. The fish struck as usual, but after remaining in shore for a short time, suddenly left the inshore water where the local boats do their fishing, and hauled off shore beyond the reach of all but the larger boats

Dog fish were not nearly as troublesome as they have been of recent years, though they were taken off Meccatina on the Labrador where we had not met them before. The fishery regulations were generally well observed, some poaching for lobsters, during the

close season, was carried on in the lagoons at the Magdalen Islands, and the local officers destroyed a number of traps and confiscated several boats.

I append synopsis of the reports received from some of the local officers.

I am, sir,

Your obedient servant,

WM. WALKEHAM,

Officer in charge of the Gulf of St. Lawrence Fisheries.

## SYNOPSES OF REPORTS OF LOCAL OFFICERS.

- Mr. George Forest, F. O., Bonaventure, reports that on the whole the fishery was not a bad one, though the average yield was slightly below that of 1907. The season up to the end of October was a favourable one for fishing. Not so many men were engaged in fishing as usual, there was such a demand for labour, at very remunerative wages, that the younger men did not fish. Spring herring were very abundant, but herring were scarce in the fall. The salmon fishery with nets was a good one as the returns show.
- Mr. F. X. Chappados, F. O., for the Port Daniel Sub-division, reports that the yield of the cod fishery was below the average—the low price paid for cod, and the great demand for labour ashore, owing to the extensive railway building in this subdivision quite accounts for this falling off. Spring herring were abundant all along the coast except in Port Daniel bay. Salmon net fishing was a little below an average. Smelt were unusually abundant in the fall. The regulations were well observed.
- A. T. Carter, F. O., Gaspé Sub-division, reports that salmon show quite a decrease as compared with 1907. Mr. Carter thinks the failure in the fishing was due to the fishermen not having the means of shipping their fish-owing to the loss of the boat that plied in connection with the railroad-many of the fishermen did not push the fishing, fearing that the salmon would spoil on their hands. The rivers were well stocked and the fly fishermen report lots of salmon in the rivers. Spring herring were not as plentiful as the year previous, and were scarcer throughout the whole season; for bait those taken were of fair size and good quality. Squid were plentiful. Capelin and launce were scarce. Cod fishing commenced about the end of May, and the catch shows quite an increase over 1907—in spite of the scarcity of bait. In some localities, there were not so many boats fishing-this was due to so many men finding work on the railroad and at the mills. Prices were about \$1 less than in 1907—due to the failure of the foreign markets. No mackerel were seen on the coast. Lobsters show a slight decrease as compared with last season—the fishermen report them fairly plentiful. The catch of smelt shows quite an increase over that of 1907—the price paid for this fish was about the same as last season—they are all shipped to the United States—as soon as the railway is completed to Gaspe this industry will be largely developed.
- Mr. Louis Letourneau, F. O., Mont Louis Sub-division, reports that the fishing this season began with the month of June—and on the whole was satisfactory—though fish did not seem as abundant as usual—yet the continued fine weather throughout the season permitted continuous fishing from day to day—while the high prices of the previous year encouraged the fishermen to persevere—there were over 100 new fishermen at work in this sub-division than in 1907. Herring were plenty all season, but were small and did not bring as good a price as usual. The price of codfish fell, this was a great disappointment to the fishermen. The sea coast salmon fishing with nets was not as good as usual. The dog-fish only remained on this coast for about a week—and no white porpoises were seen. The land harvest was better than in 1907 but it was still below an average—with the exception of a few families, who never work, and are always poor, there was no destitution in the Mont Louis sub-division.
- Mr. J. A. Chevrier, F. O., Southern Division of Magdalen Islands, reports that though the season opened favourably, yet on the whole the result has been unfavourable, the spring seal hunt on the ice was good at Grindstone Island, but poor at Amherst.

The spring herring fishery was as good as ever, the weather was fine and the herring remained in the bay. This fishery does not seem to show any diminution, herring were never more abundant than this season. The lobster pack was less than in 1907, and the price fell, at the date of sending this report (Nov. 20, 1908) most of the pack of 1908 is still unsold. Mr. Chevrier states that it is the general opinion that the open season of September, established a few years ago, should not be continued in the future, as it is now considered to be injurious to the fishery, as far as the fisherman are concerned they could during September find employment at other branches of the fishery. Spring mackerel fishing with nets, in June was a complete failure, the yield was 2,000 brls. below that of 1907, and the price 35 per cent lower. The summer mackerel fishery done with hook and line was also below the average. The failure of the catch of mackerel, with nets in June, was due to bad weather, the fish came in as usual, but did not remain in the bay. The cod fishery was better than in 1907, but the price was 40 per cent below that paid in 1907. As a consequence of the poor fishery and the low prices the people of the islands are not well off this fall.

Captain Azade Arsenault, F. O., on the steam launch Davies, special F. O., reports for the Eastern end of the islands. The spring catch of seals was 13,600. Herring were plentiful in the spring, but as most of the bankers succeeded in getting their baiting on the Nova Scotia coast, there was not the usual demand for bait at the islands. Spring mackerel fishery was a failure, large schools of mackerel came in and filled the nets, but owing to heavy weather the fishermen could not get out to their nets for eight days in the height of the fishing. When they could get out the nets had either sunk or been carried away, thousands of barrels of mackerel were lost in this way. Captain Arsenault picked up nets in July, which had only then come to the surface after the mackerel had rotted out of them. The lobster season was fine, and the prices, to the fishermen, good, but the pack is less than in 1907. The September fishing for lobsters is not taken advantage of, except by those who try to poach in the lagoons, about 1,000 traps were destroyed by the crew of the *Davies*, and three boats seized and confiscated. Cod fishing was poor, but very few fishermen at the islands confine themselves to the cod fishery only, only about 3,000 brls. of fall (fat) mackerel were taken. Large schools of tinker mackerel filled all the lagoons and coves about the islands, a few dog-fish were about during the fall mackerel season, they may have helped to drive those fish off. On the whole the season has been a poor one for the fishermen, and many are poorly off. There should be no famine between Oct. 10 and Nov .10 Five thousand five hundred brls. of flour were landed at the islands; this should suffice until navigation opens in the spring.

Capt. Arsenault calls attention to the necessity of a larger and better boat than the Davies to do all the work of the department at the islands. The work of looking after foreign fishing vessels in Pleasant bay and all around the place, requires a larger and faster boat than the Davies. The heavy automatic whistling and bells buoys, which are now being placed around the islands, require a good stout boat to lift and tow them.

Mr. Bruno Theriault, F. O., reports for the House Harbour district. Seals appeared on the ice about March 15, and remained for a few days, allowing a good catch to be made. Newfoundland steamers appeared about this time, and killed a great many seals further out in the ice than the shore people could reach—these vessel did not save all the seals they killed. Herring struck about April 20, but were not abundant before the 25th, when enormous schools appeared—trap net fishermen did well, finding a ready sale to bankers. Mackerel struck about June 10, but owing to the heavy weather great loss of fish and nets occurred. Fall mackerel fishing was poor except at Bryon island. Dog-fish were abundant during the fall fishing—these pests may have driven the mackerel off. Lobsters appeared about May 5, but were not plenty until the 15th, the fishing was good up to June 10—when the weather came in rough and but little more was done to the end of the season. The total catch shows a decrease as compared with last year. Cod struck about June

25, and some good catches were made. Very few people, however, go in for codfishing until the fall, when all other kinds of fishing are over.

Mr. N. A. Comeau, F. O., for Godbout Sub-division, reports that salmon were late this year in making their appearance, the spring was late with clear cold weather—the ice ran out of the rivers two weeks later than usual. The first salmon was caught in the nets on June 3, and it was the 15th before any great quantity was taken. When they did come they came with a rush, and in three weeks the fishing was over. Luckily the weather was fine-and no loss of time or gear was experienced. The yield was much above the average, nearly totalling that of last season, which was a record breaker—had the yield west of Bersemis been as good as that below, this season would have been even higher than last. Mr. Comeau notes from his records that the fish averaged two pounds heavier-and smelts and grilse were rare. Trout were scarce and small as remarked last year, it will likely be some years before they become abundant again. Cod came early and ranged well up the St. Lawrence being taken up to Bersemis, but little codfishing is, however, done up there, and as bait was scarce the fishing was below an average. Halibut are increasing, both in number and size, and as the facilities for getting them fresh to market are improved, fishermen are devoting more attention to the capture of this fish. Spring herring were abundant, but this fish was scarce in the fall. No mackerel were seen. Capelin was scarce. White whales were very numerous; it is the popular idea that this caused the scarcity of capelin. The seal hunt yielded about the average return.

Mr. T. Migneault, F. O., Moisie Sub-division, reports that salmon fishing began at Moisie on May 25, and ended on July 25. Nearly three hundred thousand lbs. of salmon were taken in the nets, and 384 fish on the fly. The yield from the codfishing was about the same as last year, though fewer men were engaged in the fishing. So many hands find employment at the Pulp Mill at Clarke City that it is becoming difficult to find men to man the codfishing boats. Bait was abundant, herring being taken all through the season. Fifty-two whales were brought in to the whaling station at Seven Islands—the whales did not run as large as usual. More halibut are being caught now as the facilities are better for getting them fresh to market.

Mr. Richard Joncas, F. O., for the Natashquan Sub-division, reports salmon net fishing began on June 3, the catch was about an ordinary one. The first cod was caught on June 2. Capelin struck June 8; the codfishing was slightly above the average. The regulations were duly observed.

Mr. Achille Cormier, F. O., Romaine Sud-division, reports the spring herring fishery opened on May 27; fish were scarce, and several vessels from Newfoundland that came to load went away empty. Capelin struck on July 1, followed at once by the cod, but neither remained long, they passed on, down to the Eastward at once. Salmon were scarce, and the pack of lobsters was about as usual. Dog-fish were abundant during August and they came right into the harbours and bays.

## INLAND DIVISION, QUEBEC.

MONTREAL, 1909.

To the Superintendent of Fisheries, Ottawa.

Sir.—I beg to submit to you my annual report for the fiscal year 1908-1909.

I have on many occasions made thorough inspection of my district.

From Dundee to Valleyfield the fisheries carried on are on the south shore of Lake St. Francis, where fishing is generally good. In some instances, however, guides take sportsmen to places where fishing is conducted illegally. Netting is not practiced but

22 - 11

there is a large quantity of night lines with which small fish and very small sturgeon are caught.

On the north side of this portion of the district, principally in the county of Sou-

langes, there is a lot of illegal fishing carried on.

In Lake of Two Mountains, where netting is prohibited, I found and destroyed hoop-nets and gill-nets on both shores as well as in Argenteuil, Rigaud and at La Pointe aux Anglais.

In Lake St. Louis the laws are pretty well obeyed, with the exception of the use of minnow nets, about one hundred of which I destroyed between Beauharnois and Cha-

teauguay. I could not ascertain the names of their owners.

At Ile Perrot, in the Lake St. Francis, for a certain portion and Lake of the Two

Mountains, as well as Lake St. Louis, the laws are far from being observed.

In the little River Chateauguay, which empties into Lake St. Louis the fishing is good, and the Provincial Fishery Overseer there enforces strict compliance with the regulations.

In the county of Laprairie the fishermen seem to do as they please. Netting is a common practice in the Little River during the close season, and different kinds of fish

are caught there.

In the county of Chambly fishing is also done unscrupulously. The same may be said of the county of Vercheres.

The county of Richelieu is somewhat better as far as the respecting of the law is

concerned.

In Lake St. Peter I am sorry to say that fishing is being practiced as though there were no laws in existence. The same remarks apply to the county of Nicolet. During last winter, in the latter county, I seized and confiscated at one time, two hundred pounds of pickerel (dore) from five to twelve inches long, also a bag of small sturgeon ranging from six to fifteen inches long; but the lesson does not appear to have been sufficient.

In the county of Champlain fishing withouth a license seems to be carried on the whole year round.

At Three Rivers the local overseer is an energetic officer and keeps a careful

watch on the fishing operations.

In the counties of St Maurice, Maskinonge, Berthier, L'Assomption, Laval and Terrebonne, illegal fishing is freely indulged in.

I may add to this black-list the counties of Jacques-Cartier and Vaudreuil.

I beg to further report that in some cases sawdust from mills is allowed to pass into small rivers which fish frequent.

I cannot speak too strongly against the use of minnow nets, which ought to be

forbidden entirely.

In the places where illegal fishing is carried on such seems due to the lack of the exercise of vigilance by the local provincial fishery overseers, as in all places where such officers are watchful, not only are infractions of the law prevented but the condition of the fisheries is much more satisfactory.

I respectfully suggest that if net fishing cannot be stopped completely in small tributaries of the St. Lawrence or in any navigable river in the province of Quebec should not be allowed except from October 1 to December 31, of each year, and then only with meshes not less than three inches extension for hoop-nets, seines and gill-nets.

I must also say a word about fish-ways as such are much needed in several places. I may name the dam at Yamaska, on Yamaska river, the one in Richelieu river at St. Ours, the one in River Delisle, county of Soulanges and at St. Martine, county of

Chateauguay.

In concluding this report I regret I cannot say that there has been an appreciable increase in the fisheries in my district during the year, and this is due, in my opinion, to the fact that there is too much netting in the tributaries of the St. Lawrence river, from the county of Port-Neuf on the north shore and Nicolet county on the south shore to the Canadian Pacific Railway bridge at Lachine.

With the obstructions caused by all these nets the game fish, and in fact every kind of fish, is prevented from ascending the streams to deposit their spawn and are also caught too young.

If you add to these evils the illegal fishing, the scarcity of fish in our rivers, is

easily accounted for.

The whole respectfully submitted.

Your obedient servant,

JOS. RIENDEAU,

Inspector of Fisheries.

## PROVINCE OF QUEBEC-

Return showing the Number, Tonnage and Value of Vessels and Boats and the Industry, in the County of Bonaventure,

RESTIGOUCHE SUBDIVISION

				,		3.0	130	1100					1011
	Fish	ing Bo	ATS.					Fishi	ng Gi	EAR (	OR MA	ATERI	ALS.
FISHING DISTRICTS.					Gill Ne	ts.		Seine	es.	Tra	wls.	Wi	ers.
Name.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value,	Number.	Value.
1 Restigouche Subdivision, Head of Tide to Maguasha	20	\$ 500	40	25	5000	\$ 5000			\$				\$
						ВО	NA	VEN	TUR	E S	UBDI	VIS	ION
Maguasha and Nouvelle Carleton Maria New Richmond and Black Capes. Capelin New Carlisle. Paspebiac	30 60 70 50 100 150 20 60	7000 1000 1200 800 2000 3000 500 1500	150 100	200 300 100 400 500 50	2000 4000 6000 3000 8000 10000 1000 1500	1000 2000 3500 3000 4000 5000 500 750	4 4 10 3	60 120 120 120 300 90 200	120 120 120 120 300 100 200	5	500	4 5 15	
Totals	540	17000	1130	1725	35500	19750	31	1010	1020	55	550	29	240
						Р	ΟĒ	RT D	ANIE	L SI	JBDI	vis	ION
Hopetown 2 Nouvelle 3 Shigawake 4 Port Daniel 5 Anse à Gascon Totals	50 72 39 132 146 439	1800 2500 2350 4500 1250 12400	80 120 54 160 227 641		4000 5300 1800 5450 10000 26550	2000 2650 900 2725 5000 13275	15 10 30 16	400 400 500 500 450 2250	400 400 300 500 450 2050	50 72 35 52 150 359	1000 1440 700 1040 3000 7180		

## Gulf of St. Lawrence District.

Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Province of Quebec, for the Year 1908.

(Tide Head to Maguasha).

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Taguasha to Paspebiac Point).    1	Taguasha to Paspebiac Point).    1
	4 235 1210 455 3 900 1500 1465 20 26 1030 165 51570 2 25000 119,215 00

9-10 EDWARD VII., A. 1910

# RETURN showing the Kinds and Quantities of Fish and Fish Products in RESTIGOUCHE SUBDIVISION

							-	Kinds
FISHING DISTRICTS.  NAME.	Salmon, fresh, lb.	Herring, salted, brl.	Herring, fresh, lb.	Herring, smoked, lb.	Lobsters, preserved in cans.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brl.
1 Restigouche sub-division, Head of Tide to Maguasha Head	30000	50	4000			10		
				ВО	NAVEN	TURE	SUBDI	VION
1 Maguasha and Nouvelle. 2 Carleton. 3 Maria. 4 New Richmond and Black Capes. 5 Capelin. 6 Bonaventure. 7 New Carlisle. 8 Paspebiac.	15000 55000 40000 50000 1500 24500	100 400 200 300 400 350 30 75	4000 4000 5000 4000 4000 5000 3000 2000	10000 5000 12000 3000 15000	1488	10 10 10 10 20 10 10	60 70 80 50 2800 3500 75 3000	2 4
Totals	186000	1855	31000	45000	5568	70	9635	10
				POF	T DAN	IEL S	UBDIVI	ISION
1 Hopetown	2000 16000 10000			4500 5000 5000 10000	20445		1300 1450 600 3400 4300	10 12 17 26
Totals	28000	1415		24500	39957		11050	65

SESSIONAL PAPER No. 22

the County of Bonaventure, Province of Quebec, for the Year 1908.

(Head of Tide to Maguasha).

of Fis	SH AND	Fish	Produ	cts.			r.					
Haddock, fresh, lb.	Haddock, dried, cwt.	Hake, dried, cwt.	Halibut, lb.	Trout, 1b.	Smelts, lb.	Eels, brl.	Tom cod or frost fish, lb.	Fish oil, gal.	Fish as bait, brl.	Fish as manure, brl.	TOTAL VALUE OF ALL FISH.	Number.
				4000	70000		25000			700	\$ cts. 9,815 00	1
(Magua	asha to	Paspel	oiac Po	oint).								
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	140 155 35 650 900	20 25 15 65 60	1000 2500 600 2000 3000		15000			650 750 300 1700 2100	200 350 150 700 1000	1800 3000 2000 4000 3000	32,018 40	1 2 3 4 5

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RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the County of Gaspé, Province of Quebec, for the Year 1908.

1			Number.	1				H2847667 8001191	
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			Number.		2 8 8 8 6 E			100 100 100 100 100 100 100 100 100 100	
	OTHER	Freezers and Ice Houses.	Value.	<b>69</b>	200	009	-		resul
		Fre and Hor	Number.			4			
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-	PLAN	ps.	$\Lambda$ alue.	6/9	4000 1600 2400 3400 1200 760	13360	(:	1400	
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		Districts.	Yumber.	Gaspé County.	Newport 2 Pabos 3 Grand River 4 Cape Cove 5 Percé & Bonaventure Is. 6 Corner of Beach	Total		Barachois  Malbaie  Point St. Peter ChienBlanc to S'dyBeach Gaspe North and South Franker of Ship Head Cape des Rosiers to Jersey Oove Griffin Cove Griffin Cove II Little Cape to Echourie. LI Pixtle Cape to Echourie. Total	

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Gaspé, Province of Quebec, for the Year 1908.

GRAND RIVER SUBDIVISION (Point Macquereau to Barachois).

					KIND	s of	Fisi	H				Fish.	
Number.	Districts.	Salmon, fresh, lb.	Herring, satted, brls.	Lobsters, preserved in cans, lb.	Cod, dried, cwt.	Cod, Tongues and Sounds, brls.	Haddock, dried, ewt.	Halibut, lb.	Smelts, lb.	Fish Oil, gall.	Fish as bait.	TOTALVALUE OF ALL F	Number.
	Gaspé County.												
2 P 3 G 4 C 5 P	lewport abos rand River ape Cove ercé and Bonaventure Island orner of Beach	4000 16800 6000  17500	100 25 200 360 120 30	10560 8688 7824 24000 4800 7584	2450 750 12700 5300 4500 1080	10	15	500	3000 2800 11000  5000	500 8000 4500	$2000 \\ 1500 \\ 1200$	9473 67487 36105 25130	00 1 90 2 20 3 00 4 00 5 20 6
	Total	44300	775	63456	26780	10	110	2000	21800	19200	6750	167104	30

## GASPE SUBDIVISION (Barachois to Fame Point).

1	Barachois	3500	110		3476	 		7000	2317	725	18794	60	1
2	Malbaie	3500	216	8400	3915	 			2610	908	23779	50	2
3	Point St. Peter		50		1080	 			720	295	5743	50	3
4	Chien Blanc and Sandy Beach.	14390	710	5472	7554	 			5036	1298	44445	90	4
5	Gaspé North and South	26385	10		270	 		66920		38		75	5
6	Peninsula and Little Gaspé	10242	60		1710	 [ • • • •			1140	356	10377	30	6
7	Grande Grève and Ship Head.	1049	150		2062	 			1375	655	11506	35	7
8	Cape des Rosiers & Jersey Cove		490		6811	 			4540	637	35172	00	8
9	Griffin Cove		275		4564	 			3043	1067	<b>24</b> 288	90	9
10	Fox River		470		7395	 	8200		4930	1937	40597	00	10
11	Little Cape to Echourie		155		2958	 			1972	383	15174	60	11
12	Pont Jaune to Fame Point		179		4779	 			3168	444	23927	40	12
						 1						!	
	Total	59066	2875	21687	46574	 	8200	73920	31011	8743	262481	80]	

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the County of Gaspé, Province of Quebec, for the year 1908.

River)
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Point
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SUBDIVISION
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	Number.		12247001-80			-0.00	
WHOLE FISHING	Char	6€	1684 4208 8736 8736 8304 4324 4324 18054 4844	56234		577 3610 1651	5838
1	Value.	€	1000	4000			
W S	Number.			63			1
oke nd Louses.	.9ulsV	66	400 600 3000 1000 1000	10000		: : :	
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ezers ad ouses.	Value.	<b>69</b>	200 1000 1000 2600 600	4900			
Free an Ice H	Number.	,		14	Chatte		
Lines.	Value.	<b>69</b>		2624	Саре		450
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ill Ne	Fathoms.		1200 3300 3300 2150 2150 2400 7500 4200	33500	D) NC	590 3487 1313	5390
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	Men.		21 62 52 101 101 123 103	929	DIV	16 148 59	223
	Value,	€€	500 1400 1800 760 2400 800 1100 3450	13410	s sub	160 1705 752	2617
	Number.		13 37 37 36 36 36 36 73	438	LNC	105 43	158
					ANNE DES MO		
Districts.	Хитрег,	Gaspé County.	1 Grand Etang 2 St. Yvon 3 Chloydorme 4 Etite Anse and Frégate Point 5 Grand and Little Valley 6 Magdalen River 7 Manched Epée et Gres Morne. 8 Anse Pleureuse and Mont Louis 9 Rivière à Pierre and Claude.	Totals	STE.	1 Marsouins and Martin River 2 Ste. Anne's 3 Cape Chatte	Totals
	Gill Nets. Hand Lines, and and and and and and and and and and	Mumber:  Value.  Value	DISTRICTS.  Outputy.  Outp	Carand Etang   County.   Carand Etang   Carand Et	Care   County   Case   County   Case   County   Case   County   Case   County   Case   Case   County   Case   Case   Case   Case   County   Case   Care	Charle Range   Charles	
RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Gaspé, Province of Quebec, for the Year 1908.

MONT LOUIS SUBDIVISION (Fame Point to Claude River).

	Number.		1004506700
	Toral Value of All Fish,	& cts.	5,632 50 14,760 00 14,920 00 3,920 00 18,447 50 8,005 00 11,640 00 12,640 00 12,585 00
	Fish as manure, brls.		220 220 150 150 655
	Fish as bait, brls.	,	25 000000000000000000000000000000000000
	Fish oil, galls.		900 1300 2250 2250 2000 2000 8000 13100
	Halibut, lb.		200 200 1000 15000 18400 52100
	Cod, tongues and sounds, bris.		
KINDS OF FISH.	Cod, dried, cwt.		1100 2800 2850 1850 3060 1100 1650 2650 2650 1400
ZINDS O	Herring, smoked,		
*	Herring, fresh, lb.		
	Herring, salted, brls.		25 100 150 90 300 300 300 1109 500
	Salmon, salted or smoked, lb.		
	Salmon preserved in cans, lb.		
	Salmon, fresh, lb.		2000 2000 2500 3300 2000 8200 5400
	DISTRICTS,	Gaspé County.	1 Grand Etang 2 St. Yvon. 3 Chlorydorme 4 Petite Anse and Frégate Point 6 Magdalen River. 7 Manche d'Epée et Gros Morne 8 Anse Pleureuse et Mont Louis 9 Rivière à Pierre and Claude.  Totals.
	Number,		128470F80

e River to Cape Chatte).
(Gland
SUBDIVISION
MONTS
DES
ANNE
STE.

	1,885 00 17,749 05 6,342 50	25,976 55
	200	24 270
	100 1399 525	2024
•	13200 5000	19500
Chaste		
Cape	220 2297 750	3267
Kiver to		
lande		
5) NO	80 1154 388	1622
18181		
SUBD		
SLAC	2300 1199 3260	6229
STE. ANNE DES MONTS SUBDIVISION (Glaude Kiver to Cape Charle).	1 Marsouins and Martin River. 2 Ste. Anne's. 3 Cape Chatte.	Totals

1000

9-10 EDWARD VII., A. 1910

60 250

28 11900

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., MAGDALEN ISLAND-

		E	Fishi	ing \	7esse	LS A	ND BOA	TS.			Fisi	HING	GEAL	R OR	Мать	ERIALS.
	Districts.		Ve	essels			Boats.			Gill Ne	ts.	5	Seine	s,	Trap	Nets.
Number.		Number.	Tonnage.	Value.	Total fisher- men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
				\$			\$				\$			\$		\$
2 A	Intry Island	4	54	1300	19	12 189 285	360 5670 8550	466	3150	3240 6200 2330	1350 10000 5200			3000 3450		7500
	Totals	4	54	1300	19	486	14580	1255	3970	11770	16550	20	3075	6450	13	7500
				'							М	AGI	AL	EN I	ŜLA	ND-
2 G 3 G	ll Right Islandrand Entry	2 3		1500 2000		75 150	4500	300	200	6000 1500	1600 400				7 20	3500 8000
	Volf Island					$\frac{10}{40}$	$\frac{400}{1600}$			60 450	$\frac{15}{120}$	<u>î</u>	60	250	· · · · i	400

9500 550 250

8010

2135

5 140 3500

Totals.....

SESSIONAL PAPER No. 22 in the County of Gaspé, Province of Quebec, for the Year 1908. SOUTHERN SUBDIVISION.

				Lob	STER P	LANT.			Отнен	Fix	TURES I	USED	IN FIS	HERII	ES.		
Frawls	Ha Lin			anne-	Tra		loyed in	a	reezers nd Ice louses.	and	noke Fish uses.		rs and	Ste	ugs, amers nacks.	Whole Fishing	
Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons Employed   Canneries.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	GEAR.	Name box
\$		\$		· '\$		\$			\$		\$		\$		\$	\$	
	$\begin{vmatrix} 250 \\ 1220 \\ 1575 \end{vmatrix}$	75 250 600	4	50 8000 4500	250 19500 16580	$\begin{array}{c} 200 \\ 17500 \\ 14800 \end{array}$	5 107 148	9 5	2500 2600	30 45	600 850	4 6	4500 10500	1 5	275 2500	2,035 55,095 62,650	5 9
3100	3045	925	15	12550	36330	32500	260	14	5100	75	1450	10	15000	6	2775	119,780	
	HER	N S	UH	BDIVIS	SION.					75					2775		
•	300 500	60 100		7000 15400	8000 22000	8000 22000	82 185		4000 3000	7	500	7 8	25000 4000	2	2800	54,860 <b>62,20</b> 0	
	20 200	10 40	1	500 2300	1500 6400	1500 6400	15 77					2	600	1	100 350	2,525 12,060	í
	1020	210	33	25200	37900	37900	359	3	7000	1	500	17	29600	8	3950	131,645	)

9-10 EDWARD VII., A. 1910

RETURN showing the Kinds and Quantities of Fish and Fish Products in the

## MAGDALEN ISLAND-

							Kinds	of Fish	•					
Number.	Districts.	Salmon, fresh, lb.	lb.	a 200	Herring, fresh, lb.	Herring, smoked, lb.	Mackerel, salted, brls.	Lobsters, preserved in cans, lb.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lb.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, 1b.
2	Entry Island			55 1250 544 . 1849	7800 5000		248 1532 3363 ————————————————————————————————	107712 114912 		46 4193 3766 8005	10 6  16			
			·						M	AGDA	LEI	N IS	LAN	ND—
2 3 4	All Right Island  Grand Entry Island  Grosse Isle  Wolf Island  Fryon Island  Total			200			1500 1000 20 650 3170	56112 187248 47040 290400		500 800 10 200 1510				

SESSIONAL PAPER No. 22

County of Gaspé, Province of Quebec, for the Year 1908.

## SOUTHERN SUBDIVISION.

Hake, sounds,								KINE	os of	Fis	н.							
1800	Hake, dried, cwt.	Hake, sounds, lb.	Pollock, cwt.	Halibut, 1b.	Trout, lb.	Shad, brls.	Smelts, 1b.	or rls.	Bass, lb.		Eels, brls.	Oysters, brls.	Fish oil, gall.		Fish as manure, brls.		VALUE OF .	ALI
1800 25 8350 800 360 3600 88,740 10 24500 1000 1200 12000 129,413 60 3600 88,740 10 3000 3600 3600 3600 3600 3600 3600						}											\$	ets.
THERN SUBDIVISION.													8350	800	360	3600	88,740	1(
				4800							55		33470	1840	1560	15900	223,049	20
	NOI	атн	ERN	4800		ISIO	N.				30		24500	1840	1560	12000	129,413	8
6300 10000 3000 96,314 40													6300 200 6080	275		100	942	56
200 275 100 942 50													)	22975		13600		

Return showing the Number, Tonnage and Value of Vessels and Boats and the Quan in the County of Saguenay, Province

GODBOUT SUBDIVISION

		Fish	ING	Vess	ELS A	AND BO	OATS.									Fı	SHIN	G (	FEAR
DISTRICTS.		Ve	ssels			Boats.		(	Gill Ne	ts.		Seine	es.		rap ets.	Tr	awls	w	eirs.
Number.	Number.	Tonnage.	Value.	Total fish- ermen.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value,	Number.	Value.
Saguenay Co.			\$			\$				\$			\$		\$		\$		\$
1 Tadousac to Bersemis 2 Pointe aux Ou-	3	50	1350	7	51	1020	73	62	4440	2220	1	45	70					53	530
tardes to Pte des Monts 3 Trinity Bay	3	40	450	6	52	1040	60	116	8120	4060	5	265	320			6	185	4	40
to Jambons	5		1500	14	96	1920	84	127	8890	4445	-	ļ	310	-		9	270		
Totals	11	181	3300	27	199	3980	217	305	21450	10725	11	535	700			15	455	57	570
Name of the Control o													MOI	SI	E ST	ЈВ	DIV	IS	ION
1 St. Margarets 2 Seven Islands 3 Moisie & Pigou.	i	13	185	3	7 29 20	650 2550 1400	14 58 40	7 84 70	910 2062 6259	900 2250 5400	4	140 329 259	120 293 195		• • • •				
Totals	1	13	185	3	56	4600	112	171	9231	8550	9	728	608						
,							,					M	ING	AI	N SU	JB:	DIV	IS	– ION
1 Riv.aux Graines and Chaloupe. 2 Sheldrake 3 Thunder River 4 Dock to Jupita-		* * * * *			19 30 54	1425 1200 4120	37 41 111	8 7 12	160 140 240	120 105 240	5	140 175 385	320 375 825	1	500				,
gan 5 Magpie 6 St. John's River 7 Long Point, Mingan and					11 32 46	825 2560 3450	26 77 111	. 2 8 10	50 180 200	40 160 <b>2</b> 00	10	70 350 350	150 750 750						
Romaine 8 Esquimaux Pt.					30	2250	82	8	160	160	8	280	600						
to St. Charles.					59	5900	174	10	200	150	8	280	600						
Totals	• •	• • • •			281	21730	659	65	1330	1175	58	2030	4370	1	509				
										N	ΑΊ	ASI	IQU	A	SU	Bl	DIV	ISI	ON
Piastre Bay to Pashashiboo 2 Agwanus and			,		9	1075	13	6	330	140	1	50	90						
Nabisir pi 3 Mission Island 4 Natashquan					25 8 40	2509 800 5000	60 20 120	4 5	320	130	4 2 8	50 50 400	270 180 720		1				
Totals					82	9375	213	15	1250	870	15	550	1260						

tity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry of Quebec, for the year 1908.

(Tadoussae to Jambons).

R N	ATE	RIALS			Lobs	rkr Pl	ANT.			Отне	r Fi	XTURES	USE	D IN F	'ISHE	RIES.	Whole Fishing Gear.	
	nelt ets.	Ha Lin			anne-	Tra	ps.	ployed ries.	an	eezers d Ice ouses.	and	noke Fish ouses.	8	iers ind narfs.	Ste	ugs, amers macks.	Wносе Сн	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Persons employed in Canneries.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Value.	Manager
	\$		\$		\$		\$			\$		\$		\$		\$	\$	-
1	35	42	12						37	1110							6347	
2	90	127	37						14	1239	10	500					7961	
		172	51	1	375	200	100	7	22	1830	11	550	1	300	1	1500	13151	
3	125	341	100	1	375	200	100	7	73	4179	21	1050	1	300	1	1500	27459	
Jan	nbons	s to P	igou	).														
		25 100 80	12 50 40						1 1 1	100 100 1000	1	40 30	· · · · · · · · · · · · · · · · · · ·	300			1822 5458 8335	
• • •		205	102						3	1200	2	70	1	300			15615	
Pig	ou to	St. 0	×1 1															
			Jhari	les)	•													
		148 164 444	103 114 310	les)							4 6 10	100 2500 3000	4 5 10	80 150 300			2148 4944 8795	
		164	103 114								6	2500	5	150			4944	
		164 444 104 308	103 114 310 72 215		•				2	500	6 10 5 12	2500 3000 2000 5000	5 10 3 5	150 300 75 150			4944 8795 <b>3162</b> 8835	
		164 444 104 308 444	103 114 310 72 215 310		200	100	100	4	2	500	6 10 5 12 15	2500 3000 2000 5000	5 10 3 5	150 300 75 150			4944 8795 <b>31</b> 62 8835 10010	The state of the s
		164 444 104 308 444 328	103 114 310 72 215 310 229 480 1833		•	100	100	4 4		500	5 12 15	2500 3000 2000 5000 5000	5 10 3 5 10	150 300 75 150 300			4944 8795 3162 8835 10010	The state of the s
St.	Char	164 444 104 308 444 328 696 2636	103 114 310 72 215 310 229 480 1833	1 1	200	100				• • • • • •	6 10 5 12 15	2500 3000 2000 5000 5000	5 10 3 5 10	150 300 75 150 300			4944 8795 3162 8835 10010 3739 8930	The state of the s
St.	Char	164 444 104 308 444 328 696 2636 les to	103 114 310 72 215 310 229 480 1833	1 1 ash	200 200 200	100	100	4	2		6 10 5 12 15  10 62	2500 3000 2000 5000 5000 1500 19100	5 10 3 5 10 	150 300 75 150 300  1055			4944 8795 3162 8835 10010 3739 8930 50563	The second secon
St.	Char	164 444 104 308 444 328 696 2636 les to	103 114 310 72 215 310 229 480 1833	1 1 ash	200 200 200 aquan I	100 Point).	100	13			6 10 5 12 15  10 62	2500 3000 2000 5000 5000 1500 19100	5 10 3 5 10 	150 300 75 150 300  1055			4944 8795 3162 8835 10010 3739 8930 50563	
St.	Char	164 444 104 308 444 328 696 2636 les to	103 114 310 72 215 310 229 480 1833	1 1 1 2 ash	200 200 200	100	100	13	2		6 10 5 12 15  10 62	2500 3000 2000 5000 5000 1500 19100	5 10 3 5 10 	150 300 75 150 300			4944 8795 3162 8835 10010 3739 8930 50563	

9-10 EDWARD VII., A. 1910

Return showing the kinds and quantities of Fish and Fish Products in the GODBOUT SUBDIVISION

			]	Kinds of	Fish.			
Districts.	Salmon, fresh, lb.	Salmon, salted or smoked, lb.	Herring, saltèd, brls.	Herring, fresh, lb.	Lobsters, preserved in cans, lb.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls. /
Saguenay County.								
Tadousac to Bersimis Pointe aux Outardes to Pointe des Monts Trinity Bay to Jambons	67000 52942 95500	1500 1200	51 61 108	20000 3000 7500	96	125	75 760	
Totals	215442	2700	220	30500	96	125	835	
1 St. Margarets	$\frac{17000}{40000}$ $224132$		$     \begin{array}{r}       12 \\       200 \\       342     \end{array} $	254 1400	• • • • • •		$258 \\ 304 \\ 1298$	1
Totals	281132		554	1654			1860	1
Totals	281132		554	1654	MINO	GAN SU	1860 UBDIVI	1 ISIOI
Totals  River aux Graines and Chaloupe Sheldrake. Thunder River Dook to Jupitagan Magpie. St. John's River Long Point, Mingan and Romaine Esquimaux Point to St. Charles. Totals	100 5900 4990 11780 7800 21080		554		MINO 480 480	GAN SU		
River aux Graines and Chaloupe	100 5900 4990 11780 		58		480		812 885 3339 661 2508 2808 2523 3733	
River aux Graines and Chaloupe	100 5900 4990 11780 		58	NATA	480	JAN SU	812 885 3339 661 2508 2808 2523 3733 17269	ISIO

SESSIONAL PAPER No. 22

## County of Saguenay, Province of Quebec, for the Year 1908.

(Tadoussac to Jambons).

					Kinds	of Fish.						
Halibut, Ibs.	Trout, Ib.	Smelts, lb.	Eels, brls.	Sardines, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, No.	White Porpoise, No.	TOTAL VALUE OF ALL FISH.	Number.
8000 27100	3500 3200 2900	7000	14	35	15 15 34	3210 1895 360	25 100	160 31 95	374 367 72	67	\$ ct 13,533 0 11,061 5 22,483 3	0   1 5   2
35100	9600	7000	14	55	64	5465	125	286	813	69	47,077 8	5
(Jambo	ons to ]	Pigou).										
$2180 \\ 11000 \\ 4200$	1450 3115			••••		300 156675 850	20 114 175	15 5525 24	38 230 112	52	4,325 5 59,711 5 42,464 8	) 2
17380	4565			• • • • •		157825	309	5564	380	52	106,501 8	1
(Pigou	to St.	Charle	s).									
7200 2400 9800 1260 3200 5700 3900 8200				,		530 565 2130 400 1200 1400 1200 3400	150 160 500 100 400 450 400 600		10 15 10 		4,785 56 5,535 74 18,416 56 5,137 56 12,566 00 15,471 00 15,865 56 20,255 26	2 3 3 4 3 5 6 6 7
41660	,					10825	2760		360		98,033 00	
(St. Ch	arles t	Nata:	shquan	Point).								
2700	600	3100		104		1161 1472 476 2200	75 300 80 450		187 24 12 100		5,812 7! 9,896 60 3,050 30 19,060 00	$\begin{vmatrix} 2 \\ 3 \end{vmatrix}$
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-2100 - 400 - 15

RETURN SHOWING the Number, Tounage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the County of Saguenay, Province of Quebec, for the year 1908.

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West	FISHING GEAR.	Value,	₩	1,398 0 166 0 691 0 2.720 0	4,975 0
FIXTURES USED FISHERIES.	Piers and Wharfs.	Value.	49	150	400
URES	Pi Wh	Number.		4	9
er Fixtures in Fisheries	Smoke and Fish Houses.	Value.	<b>99</b>	100	300
OTHER	Sn and Ho	Number.		9 4	10
	ui pəko	Persons empl		16 33 23	24
ANT.		·sulaV	<del>00</del>	100 100 850	1074
Pr	Traps.	Number.		100 100 850	380 1074 1074
LOBSTER PLANT.	Janne- ries.	Value.	<b>€</b> ₽	250	380
	1	Number.		HHH01	10
	d lines	Value.	₩.	15.62	51
r. Eg	Ham	Number.		28 <del>4 8</del> 8 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9	98
FISHING GEAR OR MATERIALS.	Trap nets. Hand lines	Value.	0€	150	400
B M	Traf	Number.		::	2
CAR O	38.	Value.	69		120
ද ල	Seines.	Fathoms.			138
HIN		Number.		- :	8
Fis	ets.	Value.	₩	220 40 140	480
	Gill nets.	Fathoms,	***************************************	260	48 42 1080
		Number.		13 16 2 4 14 8 19 14	8 42
ATS	1 1	Men.			
FISHING BOATS.	Boats.	Value.	<b>%</b>	720 50 275 725	1770
Fish		Number.		1072	28
	Districts.			gashka isheecootai manne. oachoo	Totals.
	DIST	Number,		1 Kegashka 2 Washeecootai 3 Romaine 4 Cocoachoo	

ST. AUGUSTIN SUBDIVISION (Cape Whittle to Chicatica).

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amu ngto Mec on Ba atina erie a	otals
amamu vrringto ttle Med utton B secatina mderie ?	Totals
1 Etanamu and St. Mary's 2 Harrington 3 Little Meccatina and Whale He 4 Mutton Bay 5 Meccaina and Tabatiere. 6 Fonderie à Fecteau to St. Augu	Totals

SESSIONAL PAPER No. 22

RETURN showing the kinds and quantities of Fish and fish Products in the County of Saguenay, Province of Quebec, for the Year 1908.

ROMAINE SUBDIVISION (Natashquan Point to Cape Whittle).

	OF OF	cts.	8884	25
	TOTAL VALUE OI ALL FISH	<b>66</b>	2,256 384 1,278 3,350	7.270 2
	Seal skins, number.		25	25
	Fish as bait, brls.		80	210
Ť.	Fish oil, galls.	45-45-400	160 100 135	395
KINDS OF FISH.	Trout, lbs.		1800	1800
KINDS	Cod, dried, cwt,		220	496
	Lobsters, preserved in cans, lb.		960 233 288 6144	7675
	Herring, salted, brls.		60 73 175	308
	Salmon, salted or smoked, brls.		98 %	47
	DISTRICTS.		1 Kegashga. 2 Washeecootai. 3 Romaine. 4 Cocoachoo	Totals.

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I Etamamu and St. Mary's	30	-: 480	20	3000	350	30	175	1,487 75
2 Harrington	2	62	2593	:	2600	200	200	_
Little Meccatina and Whale Head		2 4000	1200		1150	300	150	7,786 50
Mutton Bay.	10	. 560	5010	:	3750	750	250	25,425 50
5 Meccatina and Tabatière	40	:	1500		3500	300	750	9,787 50
6 Fonderie à Fecteau to St. Augustin	18	:	200	3000	750	100	210	
7 Point à Giroux to Chicatica	9		75	:	95	09	15	564 75
Totals	114	91 5040	10628	0009	12195	2040	1750	60,963 50
	- Maria				_			,

9-10 EDWARD VII., A. 1910

RETURN Showing the Number, Tonnage and A alue of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the County of Saguenay, Province of Quebec, for the Year 1908.

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	Hand Lines.	Number.		220 240 396 324 200 120 300	1848		3000	80
	Smelt- nets.	.enlaV	69	350 150 610 800 800 2000 2000 300	9870			
	Sm	Zumber.		8 9 2 5 4 7 4 7 C 0 1	186	,		
ALS.	Trawls.	Value.	<del>€</del>	60 40 120	450			
TERL	Tra	Number.	1	30 00 00 00 00 00 00 00 00 00 00 00 00 0	95			:
FISHING GEAR OR MATERIALS.	Trap-nets.	Value,	€€	4700 8000 111800 1600 4900 12000 6000 3000	\$2000		800	800
EAR	Traj	Number.		800.4800.00 800.4800.00	130		4 : :	4
HING G		Value.	<del>\$9</del>	405 1100 200 600 600 600	4230		: : :	*
Fisi	Seines.	Fathoms.		275 275 520 520 240 80 80 875 50 50 50 50 50 50 50 50 50 50 50 50 50	2165			
		Number.		201120212	35			
	ts.	·ənlaV	69	195 150 600 100 75	1120	ND.	200	425
	Gill Nets.	Fathoms,		325 200 1000 200 150	1875	ANTICOSTI ISLAND.	300	999
· THE STATE OF THE		Number,		862846	40	STI	1001	23
		Nen.		62 95 142 18 18 55 120 48 85	655	LICC	36 112 14	62
SOATS.	Boats.	Value.	<del>69</del>	2300 3500 3800 600 2800 1500 2300	19800	AN	312 750 750	1812
MD B	į	Number.		447 777 100 88 88 88	396		35	55
FISHING VESSELS AND BOATS.		Total fish- ermien.			61			
G VES	Vessels.	Value.	₩	4500 2000 10000	16500			
FISHI	Ve	Tonnage.		90	484		-	
		Number.		H : :014	2			:
	Districts.		Saguenay County.	1 Chratica to Burnt Island 2 Bonne Esperance. 3 Fidgeon Island to Salmon Bay. 4 Little Fishery and Five League. 5 Middle Bay and Belles Amours. 6 Bradore 7 Long Point 8 Greenly Island.	Totals		1 Fox Bay. 2 English Bay. 3 Strawberry Cove	Totals
4.1		Xumber.		H 24 22 4 10 0 14 00			- c1 c3	

SESSIONAL PAPER No. 22

REPURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the County of Saguenay, Province of Quebec, for the Year 1908-Continued. BONNE ESPERANCE SUBDIVISION (Chicatica to Blancs Sablons).

		Number.		H0000000000000000000000000000000000000		1000	
	WHOLE FISHING GEAR.		<b>%</b>	8, 963 24, 780 24, 280 3,615 15, 463 34, 730 10,515 14, 850	137,196	33,001 5,465 1,965	40,431
	Tugs, Steamers and Smacks.	Value.		10000 40000 40000	0006	2000	2000
ŠŠ	Stead	Number.			ಣ	-	1
FISHERD	Piers and Wharfs.	Value.	ø.	25000 25000 3700 3700 2000 2000 2500	15200	1500	1500
SED IÑ	Pier Wh	Number.		20 20 20 20 20 20 20 20 20 20 20 20 20 2	06		
Other Fixtures used in Fisheries.	Snioke and Fish-houses.	Value.	<b>%</b>	2000 2000 2500 500 800 800 1800	8400	3000	3500
HER F	Sr Fish-	Number.		20 10 10 4 4 8 9	72	100	20
O	Freezers and Ice-houses.	Value,	€9		- ON	300 500	800
	Free an Ice-h	Number.			101 10		67
	nbjoked	Persons er			OWA TOT TOTAL AND	31	31
ANT.	Traps.	Value.	<b>€</b> ₽			1554	1554
LOBSTER PLANT.	Ä	Number.				3700	3700
Lobs	Canneries.	Value.	€9:			25000	25000
	Can	Number.				T ::	
	Districts.		Saguenay County.	1 Chicatica to Burnt Island. 2 Bonne Esperance. 3 Fidgeon Island to Salmon Bay. 4 Little Fishery and Five League. 5 Middle Bay and Belles Amours. 6 Bradore. 7 Long Point.	Totals	1 Fox Bay. 2 English Bay 3 Strawberry Cove.	Totals

RETURN showing the kinds and quantities of Fish and Fish Products in the County of Saguenay, Province of Quebec, for the Year 1908.

BONNE ESPERANCE SUBDIVISION (Chicatica to Blancs Sablons).

	Number.			38:	2
	Halibut, lb.			5000	8000
	Pollock, cwt.				
	Cod, tongues and sounds, bris.				
ucts.	Cod, dried, cwt.	2460 4000 5950 700 2000 3000 2100 5100	25310	300 300 500	820
sн Рвоц	Lobsters, fresh in shell, cwt.				
I AND FI	Lobsters, preserv'd in cans, lb.			44544	44544
Kinds of Fish and Fish Products.	Herring, fresh, lb.		ON.		
Kinds	Herring, salted, brls.	ο · · · · · · · · · · · · · · · · · · ·	62 13	40	08
	Salmon, salted or smoked, brls.	25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			
	Salmon, preserved in cans, lb.		ANTICOSTI ISLAND		:
	Salmon, fresh, lb.		TICOST	1728	1728
	Districts.	Saguenay County.  Chicatica to Burnt Island.  Bonne Esperance.  Little Fishery and Five League Emiddle Bay and Belles Amours.  Bradone Thong Point.  Greenly Island.	Totals	1 Fox Bay 2 English Bay 3 Strawberry Cove.	Totals

SESSIONAL PAPER No. 22

RETURN showing the kinds and quantities of Fish and Fish Products in the County of Saguenay, Province of Quebec, for the Year 1508-Continued.

BONNE ESPERANCE SUBDIVISION (Chicatica to Blancs Sablons).

1	Number.		H01004700F-00			-:0700	
	TOTAL PISH.	es cts.	12,726 00 19,562 50 29,506 75 3,556 25 9,876 50 14,696 50 10,435 00 24,410 50	124,769 75		14,840 40 2,195 00 2,970 00	20,005 40
	Seal skins, No.	The tax statement	120 15 100 100 20	375			
	Fish as manure,					A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
ucts.	Fish as bait, brls.		150 275 300 75 130 150 275 275	1555		. 750	930
 sн Рвор	Fish oil, galls.		2200 3000 4860 600 1730 2200 1800 3060	19450		100	460
AND FI	Coarse and mixed fish, brls.		020 110 034 00 034 00 00 00 00 00 00 00 00 00 00 00 00 00	365	ON.	0	
KINDS OF FISH AND FISH PRODUCTS.	Squid, binps.				ANTICOSTI ISLAND SUBDIVISION		
KINDS	Smelts, lb.	,			ND SUI	* 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	* * * * * * * * * * * * * * * * * * * *
	Shad, brils.				II ISLA		
	Trout, lb.		2600 1.400 800	5200	TICOSI	· · · · · · · · · · · · · · · · · · ·	
	~			:	A		
	DISTRICTS.	Saguenay County.	1 Chicatica to Burnt Island. 2 Bonne Esperance. 3 Fidgeon Island to Salmon Bay. 4 Little Fishery and Five League. 5 Middle Bay and Belles Amours. 6 Bradore. 7 Long Point. 8 Greenly Island	Totals		Bay rry Cove	Totals
	Number.		Chicatica 2 Bonne Es 3 Pidgeon 4 Little Fli 5 Middle B 6 Bradore. 7 Long Poi 8 Greenly J			1 Fox Bay 2 English Bay 3 Strawberry Cove	

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials, and other Fixtures used in the Fishing Industry by sub-division in Gulf Division, of the Province of Quebec, for the Year 1908. BONAVENTURE COUNTY.

Number.			ſ.	H01004509		,	H21804700F8	
Value,	455 455 965	1420	*	865 1781 2624 450 925 210	6855		100 102 1833 392 51 51 656 40	3554
Number.	1210	3040		1730 4466 1312 436 3045 1020	12009		.341 205 205 205 824 824 86 1280 1848 80	7300
Value.	\$ 1250 235	1485		1300	1300		125	9995
Number.	25	65		133	13		186	189
Value.	\$ 240	240			1:		570	570
Number.	. 23	29			1 :		57	57
Value.	\$ 550	7730		1680	4780		455	875
Number.	359	414					95.	110
Value.	<b>69</b>	:		7500	19400		500 5000 9900 52000 800	63600
Number.		Ti		133	31		13032	170
Value.	\$ 1020 2050	3070		490 2080  6450 250	9270		700- 608- 608- 4370- 1260- 120- 1610- 4230- 	12898
Esthoms.	1010 2250	3260		408 2575 3075 60	6118		535 728 2030 550 1138 1750 2165	7896
Number.	31	107	TY.	15 53 20 1	68	VTV	1 93 3 3 3 E	163
.9ulæV	\$ 5000 19750 13275	38025	COUN	9985 20860 21300 2771 16550 2135	73601	COU	10725 8550 1175 870 480 1120 1120	25325
Fathoms.	5000 35500 26550	67050		19898 23350 33500 5390 11770 8010	816101	ENAY	21450 9231 1330 1250 1080 3960 1875 665	40841
Number.	25 1725 690	2440	5	1007 1490 1150 202 3970 250	6908	GUI	305 171 171 155 171 150 171 171 171 171 171 171 171 171 171 17	092
Men.	40 1130 641	811		999 656 656 223 255 550		SA	217 112 659 213 48 473 655 655	439
Value,	\$ 500 17000 12400	29900		16400 49240 13410 2617 14580 9500			3980 4600 21730 9375 1770 6400 19800 1812	69467 2439
Number.	20 540 439	666		525 824 438 158 486 275	2706		199 281 822 823 320 320 55	1417
Total Fisher- men.	: : :			119	99		33	91
Value.	<b>69</b> ) : :			1300	4800		3300 185 16500	19985
Tonnage.		1		54	194		181	829
Number.	: : :	1:			6		H-:::::	19
DISTRICTS.	Bonaventure County, estigouche, Subdiv naventure	Total			Total		dbout, Subiv.	Total
	Number.   Tonnage.   Tonnage.   Tonnage.   Total   Fisher.   Tisher.   Total   Tumber.   Tathoms.   Value.   Y	Tonnage.  Tonnag	Tonnage.  Tonnage.  Tonnage.  Tonnage.  Tonnage.  Tonnage.  Tonnage.  Tonnage.  Tonnage.  Tonnage.  Tonnage.  Tonnage.  Tonnage.  Total  Tonnage.  Total  Tonnage.  Total  Tonnage.  Total  Tonnage.  Total  Tonnage.  Total  Tota	Tonnagee.    Yalue.   Tomage.   Toma	Tomasge.   Tomasge.	Total Tember:    Total Tember:		

SESSIONAL PAPER No. 22

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry by sub-division in the Gulf Division of the Province of Quebec, for the Year 1908. BONAVENTURE COUNTY.

WHOLE		Value.	88	119215 2 58320 3	184285			119780 5 119780 5 131645 6	542338		27459	50563 3		28300	40431															
-	S.S. and Smacks	.snlaV	<b>\$</b> ₽					2775 3950	6725		1500				5000 5000															
	Tugs S.	Number.					: : :	9 00	7.		-		:		<b>₩</b>															
FISHERIES.	Wharfs.	.9nIsV	<b>9</b>	25000	25000		2000 17800 4000	15000	00189		300	1055	1450	3350	15200															
	Piers and	Number.		. 67 :	C3		272	100	52			37	30	98	06															
OTHER FIXTURES USED IN	Fish Houses	Value,	¢/≎	51570	59320		40250 41300 10000	1450	93500		1050	19100	8240	4300	8400															
THER FL	moke & F	Number.		165	328	TY.	110	75	383	COUNTY.	217	3 6	67	104	27.00															
	d Ice Houses Sn	d Ice Houses Sr	d Ice Houses Sr	Ice Houses S1	nd Ice Houses	nd Ice Houses	and Ice Houses	nd Ice Houses	nd Ice Houses	nd Ice Houses S	and Ice Houses	and Ice Houses	and Ice Houses	and Ice Houses	and Ice Houses	Freezers and Ice Houses Smoke &	$V_{alue}$	<b>69</b>	1030	1730	GASPE COUNTY	600	5100	17600	AGUENAY COL	4179	1200	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9	000
	reezers ar	Number.		26	33	G	4 .4	144	937	SAG	73	ಣ ೯	1 :																	
	ies.	ne snosred rennsO ni		20	168		182	280	698		L	:	17																	
NT.	.sc	Value.	<del>69</del>	11550	13015		1336C 2800	32500 37900	86560		100	100																		
R PLA	Traps.	Number,		11550	13050		13360	36330 37900	90390		200	100	1225	150	0026															
LOBSTER PLANT.	Canneries.	Value.	0⊕	9000	3350		4550 1300	12550	43600		375	006	1450	980	000026															
	Canı	Number.		: : : : :	17		0.4	15	19			: "	191	0 7	:															
		DISTRICTS.	Bonaventure County.	Restigouche, Subdiv	Total		1 Grand River, Subdiv	lands, S. Su lands, N.	Total		Godbout, Subdiv	2 Moisie	4 Natashquan	5 Romaine " Subdiv	7 Bonne Esperance, Subdiv															

RETURN showing the kinds and quantities of Fish and Fish Products by sub-divisions in the Gulf Division, Province of Quebec, for the year 1908.

	COTINTY
	Z
1000	000
	R.E.
ycar	TIT
0110	VEN
101	BONAVENTIRE
	29

	1	Number,	1 400		t	H0124700		1	. 400470070	
		Hake, lb.		1:			1 :			
DOMA TENTONE COUNTY.		Hake, dried,		275			1:			1
		Haddock, dried, cwt.	1880	2000		110	110			:
		Haddock, fresh, lb.	5750	5750			:			:
		Cod, tongues and sounds, bris,	10	75		10 31	57		19	47
		Cod, dried, cwt.	9635	20685		26780 46574 18260 3267 8005 1510	104396		835 1860 17269 5530 496 10628 25310 820	62748
		Lobsters, fresh in shell, cwt.	100 700	08			1 :		125	125
İ	KINDS OF FISH	Lobsters, preserved in cans, lb,	5568	45525		63456 13872  222624 290400	590352		96 480 2764 7675 5040 44544	60299
	KINDS	Mackerel, salted, brls.				5143	8313			
к.		Herring, smoked, lb.	45000	69500						
COOL		Herring, tresh, lb.	4000 31000	35000	TY.	12800	12800	COUNTY.	30500	32154
CONE		Herring, salted, brls.	50 1855 1415	3320	COUNTY	2875 3015 1622 1849 200	10336	V COU	220 554 955 308 91 13 808 80	1562
N TOTAL A		Salmon, smoked, lb.		:	GASPE			SAGUENAY	2700	2700
DOINE		Salmon, salted, brls.		:	3			SAGI	47 114 62	223
		Salmon, di fresh, lb.	30000 186000 28000	244000		44300 59066 23600 6759	133725		215442 281132 51650 42600	592552
The second secon		DISLRICTS,	Gulf Division.  1 Restigouche Subdivision.  2 Bonaventure  3 Port Daniel  "	Total		1 Grand River Subdivision 2 Gaspé Bay 3 Monts Louis 4 Ste. Anne des Monts Subdivision 5 Magdelen Islands South Division 6 Magdelen Islands North Division.	Total		1 Godbout Subdivision 2 Moisie 3 Mingan 4 Natassiquan 6 St. Augustin 7 Bonne Esperance 8 Anticosti Island	Total
11		Number.	H 60 60			H0100 4100		-	-00 4 10 0 F-00	

RETURN showing the kinds and quantities of Fish and Fish Products by sub-divisions in the Gulf Division, Province of Quebec, for the Year 1908.

BONAVENTURE COUNTY.

Contact   Cont	69 502,441 24
// poise No.	1 55
3360 3360 3360 3360 3360 3360 3360 3360	
Seal skins,	4026
2212	5850
7500 22102 125 2500 00	8834
Eish oil, 83190 112605 112600 112600 112600 112600 112600 112600 112600 112600 112600 112600 112600 112600 112600 112600 1126000 1126000 112600 112600 112600 112600 112600 112600 112600 112600 1126000 112600 112600 112600 112600 112600 112600 112600 112600 1126000 112600 112600 112600 112600 112600 112600 112600 112600 1126000 112600 112600 112600 112600 112600 112600 112600 112600 1126000 112600 112600 112600 112600 112600 112600 112600 112600 1126000 1126000 1126000 1126000 1126000 1126000 1126000 1126000 1126000 1126000 1126000 1126000 1126000 1126000 1126000 1126000 1126000 11260	211924
Coare and mixed fish, mixed fish, bris.	429
KINDS (2011) Strict (1900) Str	
and the second s	159
Hels, brls.   14 Y.   14 Y.   15   15   15   15   15   15   15   1	
4000 Trout, 1b.  24175 Shad, brls.  GASPE COUNTY.  GASPE COUNTY.  GASPE COUNTY.  1400 5500 14400  5500 550 550 550 550 550 550 550 550	10100
Sec. 55 G G G G G G G G G G G G G G G G G G	
	28565
.dl. thudilsH   22000   9200   173800   17380   16600   17380   16600   17380	107800
Districts.    Gulf Division.     Gulf Division.     Port Daniel         Total         Total       Share Bay         Share Bay         Share Anne des Monts Subdivision       Share Anne des Monts Subdivision       Share Anne des Monts Subdivision       Share Anne des Subdivision       Share Anne des Subdivision       Share Anne des Subdivision       Share Anne des Subdivision       Share Anne des Subdivision       Share Anne des Subdivision       Share Anne des Subdivision       Share Anne des Subdivision       Share Anne Asperance Subdivision       Share Angustin	Total
	0

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., by counties, in the Gulf Division, Province of Quebec, for the Year 1908.

GULF OF ST. LAWRENCE DIVISION.

		Number.		H 01 00	
	Wiers.	Value.	€/9	240	810
	W.i	Number.		29	98
	Trawls.	Value.	ø,	7730 29 4780 875 57	13385 86
		Number.		414 259 110	100
ERIALS.	Trap Nets.	Value.	40	19400	83000
Matu		Number.		31	201
AR OR	Seines.	Value.	<b>60</b>	3070 3270 12898	25238
FISHING GEAR OR MATERIALS.		Fathoms.		3260 6118 7896	17274
		Number.		107 89 163	359
<b>—</b>	Gill Nets.	value.	₩	38025 73601 25325	11269 209809 136951
		Esthoms.		67050 101918 40841	209809
		Number.		2440 8069 760	
	Boats.	Men.		1811 5181 2439	9431
FISHING VESSELS AND BOATS.		Value.	₩	999 29900 1811 2706 105947 5181 1417 69467 2439	5122 205314 9431
		Number.		999 2706 1417	5122
SSEELS	. Vessels,	Total fisher- men.		56	147
ING VE		Value.	00	4800 19985	24785
Fish		Топия Се.		194 678	872
		Number.		:001	83
	Districts.			1 County of Bonaventure 2 Gaspé Saguenay	Grand Total

SESSIONAL PAPER No. 22

RETURN showing the Number, Tonnage, and Value of Vessels, Boats, Nets, &c., by counties, in the Gulf Division, Province of Quebec, for the Year 1908—Concluded.

GULF OF ST. LAWRENCE DIVISION.

		Number.		H 02 to	41
Wноце	Whole Fishing Grar.		6/9	184,285 542,338 328,801	1,055,424
ž.	Tugs, Steamers Smacks.	Value.	<b>69</b>	6725	22225
HERI	Ste	Number.		:40	19
n Fisi	Piers and Wharfs.	Value.	€€	25000 68400 23555	306 116955 19
SED I	Pier Wb	Number.		252	
Other Fixtures used in Fisheries.	Smoke and Fish Houses.	Value.	· <b>69</b>	59320 93500 44960	26009 1069 197780
TXT	Sn and Ho	Number.		32.82	1069
THER ]	Freezers and Ice Houses	Value.	<b>69</b>	1730 17600 6679	
0	Fre Ice J	Number.		8 8 8 0	148
	oyed in	Persons empl		168 869 391	1428
LANT.	Canne- Traps.	Values.	€€	13015 86560 4203	74605 109889 103778 1428
LOBSTER PLANT		Number.		13050 90390 6449	109889
		Value.	69	3350 43600 27655	
	Ö	Number.		420 11 8855 61 3534 18	160
OR	Lines.	Value.	49	7 000	11809 90
HING GEAR MATERIALS.	Hand	Number.		3040 12009 7300	22349
FISHING GEAR OR MATERIALS.	MATERIALS.  Smelt Nets Hand Lines	Value.	€	1485 1300 9995	12780
Ē	Smel	Number.		29 13 189	231
	Districts			1 County of Bonaventure.	Grand Total
		Number.		2170	

RETURN showing the Kinds and Quantities of Fish and Fish Products by counties, in the Gulf Division, Province of Quebec, for the Year 1908.

TOTALS OF GULF DIVISION.

	Number.	-0120	
	Hake, sounds, lb.	: : :	
	Hake, dried, ewt.	275	275
	Haddock, smoked, finnan haddies, lb.	: : :	1 :
	Haddock, dried, cwt.	2000	2110
	Haddock, fresh, lb.	5750	5750
	Cod, tongues and sounds, bris.	75 57 47	179
	Cod, dried, cwt.	20685 104396 62748	205 187829
	Lobaters, fresh in shells, cwt.	80	205
KINDS OF FISH.	Lobsters, preserved in cans, lbs.	45525 590352 60599	696476
ZINDS O	Mackerel, salted, brls.	8313	8313
X	Mackerel, fresh, lb.	: :	:
	Herring, smoked, lb.	69500	69500
	Herring, fresh, lb.	35000 12800 32154	79954
	Herring, salted, brls.	3320 10336 1562	15218
	Salmon, smoked, lb.	2700	2700
	Salmon, salted, brls.	223	223
	Salmon, fresh, lb.	244000 133725 592552	970277
	Districts.	1 County of Bonaventure. 2 "Gaspé. 3 "Saguenay.	Grand Total
	Xumber.		
	asquiiX	1 . 24	

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish and Fish Products, by counties, in the Gulf Division, Province of Quebec, for the Year 1908--Concluded.

TOTALS OF GULF DIVISION.

	Number.	กกั้	50 1 35 2 24 3	60
	TOTAL VALUE OF ALL FISH.	· cts.	215,096 994,058 502,441	69 1,711,596 0
	.oN ,essioqroq stidW		: ::69	1
	Seal skins, No.		29500	33526
	Fish as manure, bris.		56500 2215 5850	64565
	Fish as bait, brls.		3790 46078 8834	58702
	Fish oil, galls.		$\frac{10515}{112605}$ $211924$	26400 429 335044
	Coarse and mixed fish, bris.		429	429
(SH.	Tom cod or frost fish,		26400	26400
E E	Sardines, brls.		159	159
KINDS OF FISH.	Eels, bris.		90 55 14	159
24	Pickerel, lb.			:
	Bass, lb.			:
	Smelts, lb.		96000 95720 10100	201820
	Shad, brls.			
	Trout, lb.		24175	52740
	Halibut, 1b.		9300 86600 107840	203740
	Pollock, ewt.			;
	Districts.		1 County of Bonaventure. 2 Gaspé 3 " Saguenay.	Grand Total
			-12 co	

#### 9-10 EDWARD VII., A. 1910

#### RECAPITULATION.

STATEMENT showing Yield and Value of the Fisheries of the Gulf Division, Province of Quebec, for the Season of 1908.

Description.	Quantity.	Price.	Value.
		\$ ets.	. \$ c
Salmon, fresh, in ice         Lb.           " salt         Brls.           " smoked         Lb.           Herring, salt         Brls.           " fresh         Lb.           " smoked         "           " smoked         "           " smoked         "           " smoked         "           " fresh         Cwt.           Lobsters, canned         Lb.           " fresh         Cwt.           Cod, salt         "           " tongues and sounds         Brls.           Haddock, fresh         Lb.           " salt         Cwt.           Hake, salt         "           Halibut         Lb.           Prout         "           Smelt         "           Eels         Brls.           Sardines         "           "Tom cod and frost fish         Lb.           Coarse and mixed fish         Brls.           Fish as bait         Brls.           Fish as fertilizer         "           Seal skins         No.           White Porpoises         "	970,277 223 2,700 15,218 79,954 69,550 8,313 696,476 205 187,829 179 5,750 2,110 275 203,740 201,820 159 159 26,400 429 335,044 58,702 64,665 33,526 69 52	0 15 15 00 0 20 4 50 0 01 0 02 15 00 0 30 5 00 4 50 10 00 3 00 0 10 0 10 0 10 0 05 10 00 3 00 0 03 3 00 0 11 5 00 0 03 1 55 0 05 1 25 4 00	145,541 £ 3,345 ( 540 ( 68,431 ( 799 £ 1,390 ( 124,695 ( 208,942 £ 1,025 ( 845,230 £ 1,790 ( 825 ( 20,374 ( 10,091 ( 1,590 ( 477 ( 792 ( 858 ( 100,513 £ 88,053 ( 32,282 £ 41,907 £ 276 ( )
Total for 1908-09			1,711,596 ( 1,853,767 1
Decrease in 1908–09.			142,171

#### RECAPITULATION

Showing Number of Men, Vessels, Boats and Value of Material employed in Gulf Division Fisheries, Province of Quebec, for the Season of 1908.

Description.	Value.
28 vessels of 872 tons manned by 147 men 5,122 boats, fished by 9,431 men 209,809 fathoms of gill net 17,274	\$ cts.  24,785 00 205,314 00 136,951 00 25,238 00 83,000 00 13,385 00 810 00 12,780 00 74,605 00 103,788 00
148 freezers and ice houses. 1,009 smoke and fish houses. 306 private piers, wharfs and fishing stages. 19 tugs and smacks.	26,009 00 197,780 00 116,955 00 22,225 00
Total	1,055,424 00

9-10 EDWARD VII., A. 1910

# PROVINCE OF QUEBEC-Continued.

RETURN showing the Number of Boats, Nets, &c., in the South Shore District from Rimouski County to Levís inclusive, Province of Quebec, for the Year 1908.

Posts   Post			Number.	12224705780011311411111112222222222222222222222222	1 89			
District   District	*8	ие Скуп	Многк Еізні	99	59263			
Districts.   Dis		ezers nd House.	·9nlæV	09				
DISTRICTS.  DISTRI		Fre a Ice I	Number.					
Distriction.  Di		ines.	Value.	8 100 100 100 100 100 100 100 100 100 100	416			
Distriction.  Di		Hand	Number.	081 000 000 000 000 000 000 000 000 000	416			
Districts.  Distri	ILS.		Value.	### ### ### ### #### #### ############				
Districts.   Compared to the content of the conte	FERIA	We	Number.	201 22 20 20 20 20 20 20 20 20 20 20 20 20	272			
Districts.  Distri	MA	no.	Value.	(a)	20			
Districts.  Distri	HING	Seine	Fathoms.		09			
Districts.  Distri	Fis		Number.		1			
DISTRICTS.  DISTRI			Value.	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	6010			
Districts.  Distri		II Nets	Fathoms.	400 2100 5500 3100 300 800 1150 1150 1150 1150 1150 1150 115	11315			
Districts.  Distri		35	3	35	- E	Number.	67	528
Districts.  Districts.  Dom.  Bandaries.  St. Roch et St. Jean, Port Joli.  St. Roch signals.  1 1 21 1 1 1 24 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6			Men.	80086048688888888888	292			
Districts.  Districts.  Dom.  Districts.		Soats.	Boats.	Boats.	Boats.	. suls.		2989
Apucins  sept and Grand Mechins  rosses Roches  trosses Roches  trosses Boches  trosses Banches  trosse			Number.	120108887257170888154211111 4.02124	439			
				pucins.  that and Mechins.  osses Roches.  e. Felicite atane.  vière Blanche  ndy Bay  eths  eths  os St. Fabien and St. Luce  nousli  ois Pistoles.  couna  de Temiscouata and tributaries.  couna  Andre  Lest, Andre  Lest, Andre  Lest, Cap St. Ignace, Crane and Goose Islands.  rthier  Thomas.  rthier  Waller  Michel  aumont.				

SESSIONAL PAPER No. 22

Return showing the kinds and quantities of Fish and Fish Products in the County of Rimouski to Levis inclusive, Province of Quebec, for the year 1908.

	Number.	1284766 112212141121 09 12884788 09 12884788 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
'H'	TOTAL VALUE OF F18		:	8082 17 88 120971
	Beluga Skina, No.	::::::::::::::::::::::::::::::::::::::	22	80
	Seal Skins, No.		5 14	217
	Fish as manure, brls.	180 100 100 100 100 100 100 100	16165	3
	Fish as bait, brls.	10000000000000000000000000000000000000	2 289	1 433
	Fish Oil, galls.	1100 1100 1100	5 1972	605 591
	Coarse and mixed fish, lb.	1500 2800 2800 2800 2400 10700 6600 6600 4400 1025 6600 6600 6600 6600 6600 6600 6600 6	60295	
	Clams, brls.	<b>6</b> 9 : : : : : : : : : : : : : : : : : : :	100	006
	Eels' lp'	950 800 800 800 800 1100 11720 66600 17200 20160 27150 17700	249260	14055
	Pickerel, lb.	11. 1450 1720 1720 1730	0 3470	247
	Smelts, lb.	38000	16600	1760
Fish.	dl ,bada	20 20 20 1035 70 50 11200 1180	8935	000
OF	Trout, Ib.	1500	5700	1 20
KINDS	Halibut, Ib.	200 1300 1000 1000 1000 1000 150 150	9650	400
X	Cod, fresh, salted green, lb.	34000 1119200 50200 770001 118800 118800 1000 6000 1000 6000	309800 9650	18400
	Stugeon, 1b.	\$50 450 570 1150 1130 8450 8450 8450 8450 11750 11750	32720	1000
	Whitefish, salted, lb.	30 10000 22200 14400 1750	10920	100
	Whitefish, fresh, Ib.	2000 2000 2350 2350 1070 1680	10450	1 4
	Herring, smoked, lb.	2300 1100 1000 2000	206950	100
	Herring, fresh, lb.	1200 800 800 3000 10000 9000 10000 5000 5000 1000 55000 16010 37400 52400 41000 22000 6800 13000	745100	1 1 1
	Herring, salted, brls.	45 45 580 200 200 200 200 200 200 200 2	13160	10000
	Salmon, fresh, lb.	3000 3000 3000 3000 1650 1850 1850 1850 1850 1850 1850 1850 18	16520	100
	DISTRICTS.	Capucins   Capucins   Capucins   Capucins   Craid Mechins   Street and Grand Mechins   Street and Grand Mechins   Street   Stratane   Street   Stratane   Street   Stratane   Steet   Stratane   St	Totals	6

9-10 EDWARD VII., A. 1910

RETURN of the Number of Fishermen, Boats, the Quantity and Value of all Fishing Materials and other fixtures employed in the Fishing Industry in District from Huntingdon to Nicolet on South shore and from County of Champlain to Soulange County, Province of Quebec, for the Year 1908.

11		Number.		1884707000 <u>19</u> 8	J 4 V /\
	ines.	Value.	49	250 10 20 20 20 20 20 10 6 40 6 250 0 300 150 150 150 150 150 150 150 150 150 1	4495
	Night Lines.	Number Hooks,		50000 1000 1000 1000 1000 5000 5000 500	130500
	Hoop-Nets.	Value.	6/9	1800 500 5600 5600 250 250 2500 100	10370
	Hoop	Number.		300 300 300 500 500 500 500	1692
NI.		Value.	€€	140 86 10250 100 100 400 200	2436 1362.50
Fishing Material.	Seines	Fathoms.		280 160 150 150 150 150 150 100 800 800	2436
HING M		Number.		7 441 100 100 101	72
Fisi	200	Value,	<b>69</b>	30 30 100 150 2500	2820
	Gill Nets.	Fathoms,		120 160 200 300 500	1280
		Number.		20.8 30.8 9.00	114
	Boats.	Men.		000000000000000000000000000000000000000	550
		Value.	€9	600 200 100 100 100 200 500 500 500 500 500 500	5100
		Number.		82268625811086	510
	Districts.	Уилирет,		1 Lake St. Francis and tributaries; counties of Huntingdon, Soulanges, Beauharnois and Vaudreuil  2 Lake St. Louis, Chateauguay County  3 Laprairie County  4 Vercheres County  5 Chambly River and Tributaries  6 Richelieu County  7 Tamaska County  8 Champlain and St. Maurice Counties  9 Nicolet County  8 Champlain and St. Maurice Counties  10 Berthier and Maskinonge Counties  11 L. Assomption and Terrebonne Counties  12 Two Mountains and Laval Counties  13 Hochelaga and Jacques Cartier Counties	Totals

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish in the District from County of Huntingdon to Nicolet on South shore and from Champlain to Soularge county, Province of Quebec, for the Year 1908.

HSL	Sturgeon, Ib.  Tels, Ib.  Oatflah, Ib.  Mixed and Coarse fish, Ib.  Marbottes, Ib.*	3/9	30000         1500         2000         1000         2000           500         3000         1500         1000         400           500         1200         250         1200         500           500         1200         250         1200         500           500         900         250         12000         500           500         900         250         12000         500           600         900         250         1200         1000           600         900         250         1000         1000           600         900         400         6000         600           1500         2000         1000         600           1500         2000         1000         600           1500         2000         1000         500           1000         900         1000         500           1000         900         1000         500           1000         900         1000         200           2000         2000         2000         200           2000         2000         2000	2180 685 50 2790 23,184 00
няд	Hels, Ib.  Perch, Ib.  Catfish, Ib.  Mixed and Coarse fish, Ib.		1500 2000 1000 1000 300 1500 1000 400 200 20000 1200 2000 2000 5000 2000 5000 5000 2000 5000 5000 4000 60000 5000 4000 60000 5000 4000 60000 5000 4000 60000 5000 22500 3000 1000 22500 3000 1000 22500 3000 1000 22500 3000 1000 3000 1000 1000 3000 1000 1000 3000 1000 1000 3000 1000	2180 685 50 2790
HSF	Tels, 1b.  Perch, 1b.  Catfish, 1b.  Mixed and Coarse		1500 3000 1000 4000 5000 5000 5000 1200 5000 5000 4000 1200 4000 125000 12500	2180 685 50
HSL	Fels, lb.		1500 3000 1000 4000 5000 5000 5000 1200 5000 5000 4000 1200 4000 125000 12500	1
FISH	Hels, lb.		1500 1500 1500 1500 1000	1
Гівн			999999999999999999999999999999999999999	
FISH	Sturgeon, lb.		992,273,879	3936
Er.			3000 1000 2000 3000 1500 2000 1000 1000 1000 1000 1000 1	1428
OF ]	Maskinongé, lb.		2000 1500 1500 1000 3000 4000 5000 4000 5000 4000 5000 1000 1	351
KINDS OF FISH	Pike, lb.		150 150 150 150 150 150 150 150	2930 170250
	Pickerel, lb.		2000 1000 1000 1000 2000 2500 2500 1500 1	2930
	Bass, Ib.		2000 12000 3000 100 2000 700 700 700 1500 1500 32400	3240
	Trout, lb.		26000 26000 26000 26000	2600
	Whitefish, lb.		150 150 150 2000 1000 1000 3900	
	Shad, lb.		800 800 100 700 1500 1500 9000 14600	952
	Districts.		Lake St. Francis and tributaries; counties of Huntingdon, Soulanges, Beauharnois and Vaudreuil Lake St. Louis, Chateauguay County Laprairie County Gramably County Fyamaska County Nicolet County Nicolet County S Nicolet County B Nicolet County C Namaska County S Nicolet County S Nicolet County S Nicolet County S Nicolet County S Nicolet County S Nicolet County S Nicolet County S Nicolet Counties.  11 L'Assomption and Terrebonne Counties.  12 Two Mountains and Laval Counties.	Values

\* Included in total of mixed fish.

# 9-10 EDWARD VII., A. 1910

STATEMENT of the Fisheries of the North Shore of the River St. Lawrence from Quebec to the Saguenay, including Lake St. John District, for the Year 1908.\*

	Counties of Quebec and Mont- morency, with Island of Orleans.	Charlevoix including Isle aux Coudres.	Lake St. Johns including Saguenay River.	Total Quantity.	Total Value.
Kinds of Fish.			-		\$
Eels Lb. Salmon " Bass. "	100,500 200 600	20,000 2,000	20,000	$\begin{array}{c} 120,500 \\ 22,200 \\ 600 \end{array}$	7,230 3,330 60
Smelts " Mixed fish " Trout "	10,000 3,000	80,000 8,000	16,600 15,000	$\begin{array}{c c} 400 \\ 106,000 \\ 26,000 \end{array}$	20 1,066 2,600
Whitefish. " Ouananiche " Herring "	1,000	5,000	9,000	10,000 40,000 5,000	1,000 4,000 50
Beluga skins . No. Pike . Lb. Pickerel . "		15	40,000 45,000	55 40,000 45,000	220 2,000 4,500
Values \$	6,640	3,210	16,220		26,076

<sup>\*</sup> Mostly estimated.

## RECAPITULATION

OF the Yield and Value of the Fisheries in the whole Province of Quebec, for the Year 1908

Kinds of Fish.	Quantity.	Value.
		\$
Salmon, fresh Lb.	1,011,297	151,889
salted Brls.	223	3,345
Ouananiche Lb.	40,000	4,000
Trout	110,440	11,044
Whitefish "	35,270	3,524
Smelts	218,820	10,941
Cod, dried Cwt.	187,829	845,230
ıı greenLb.	309,800	15,490 1,790
n tongues and sounds	2.110	6,330
ILAGUUUK, UILUU,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5,750	172
II TICSII	213,390	20,856
Tom cod	26,400	792
Herring, fresh	830,054	8,300
smoked.	276,450	5,529
salted Brls.	28,378	127,701
Sardines	159	477
ShadLb.	23,535	1,845
Mackerel, fresh	0.019	104 605
saltedBrls.	8,313	124,695 $825$
Hake, salted Cwt.	33,000	3,300
Bass (achigan) Lb.	77,770	7,777
Pickerel	43,600	2,180
Perch	74,050	3,702
I IKC.	3,510	351
Maskinongé	435,360	26,121
Brls.	159	1,590
Sturgeon Lb.	56,520	3,391
Lobsters, canned	696,476	208,942
fresh in shell Cwt.	205	1,025
Clams Brls.	100	200
Catfish	22,850	685 4,455
Mixed fish, fresh	445,595	858
salted Brls.	58,991	88,486
Fish as bait	80,730	40,364
	337,016	101,104
Fish oil Gall. Hair seal skins No.	33,540	41,924
White whale skins (Beluga)	146	584
		1 001 0:-
Total value for 1908		1,881,817
1907		2,047,389
		165,572
Decrease		100,012

9-10 EDWARD VII., A. 1910

#### RECAPITULATION

OF the Number of Crafts, and Fishing Gear, and the Amount of Capital invested in the Fisheries of all Quebec for the Year 1908.

Number.	Description,	Value.	Total.
		\$	\$
28 6,109 223,304 19,770 201 783 518 231 1,692 153,455	Fishing vessels (872 tons) Fishing boats  Gill nets (fathoms) Seines (fathoms).  Trap nets Trawls (long lines) Weirs Smelt and seal nets Hoop nets. Hand lines, night lines, &c.	24,785 217,503 145,971 26,620 83,000 13,385 57,120 12,780 10,370 16,910	242,288
90 109,889	Lobster canneries Lobster traps	74,605 103,788	316,156
174 1,009 306 19	Freezers and ice-houses. Smoke and fish-houses. Piers and wharfs (private). Fishing tugs and smacks.	27,949 197,780 116,955 22,225	178,393 364,909
			1,101,746

STATEMENT of the Number of Persons employed in the Quebec Fisheries during 1908.

Number of	men in vessels	147
17	n boats	10.746
11	persons in lobster canneries	1,428
	Total	12 321
	Total	12,321

# APPENDIX No. 7.

# ONTARIO.

REPORT BY INSPECTOR J. M. HURLEY, BELLEVILLE, ONT., OF THE DISTRICT EAST OF AND INCLUDING THE COUNTIES OF DUR-HAM, VICTORIA AND HALIBURTON, (INCLUDING LAKE SCUGOG) AND THE EASTERN BOUNDARY OF MUSKOKA AND PARRY SOUND DISTRICTS.

R. N. VENNING, Esq., Superintendent of Fisheries, Ottawa.

Belleville, 1909.

Sir,-I beg to submit the following report of the fisheries in my district during the

The spring fishing with hoop-nets for coarse fish, viz.: Pike, suckers, bull heads, catfish, etc., was very good and prices for those kinds of fish were very satisfactory, bringing ten cents per pound during cool weather. Even carp is not so much dreaded now as they bring a fair price and are easily caught, also there seems to be no evidence that they are doing the damage to other fish and the feeding grounds that it was feared

It is a pity that something could not be done to reduce the numbers of what are commonly known as dog-fish, which are caught in large numbers in the fishermen's hoopnets, and as no use is made of them, they are piled up on the shore, above the water

line, frequently in great quantities.

The sport fishing has been very good, viz.: bass, maskinonge, trout, pickerel, etc. There have been some fine catches of maskinonge in several lakes; but especially in the Rideau waters, Trent river, and Bay of Quinte; but bass is the most plentiful and the

most general throughout the district.

During my visits to the centre of the district where the waters flow towards the Ottawa river, viz.: the Madawaska and Mississippi rivers, I found that both settlers and tourists were loud in their praises of the good bass fishing, which must be due to the stocking of these waters by the Dominion government, as there was no bass fishing there previous to such stocking.

The rivers in question are large streams, and as an evidence of the result of the stocking has been the establishing of a bass fishery throughout these water systems, it may be pointed out that three years after the depositing of the young bass, these fish were caught by anglers as far as twenty miles from where the original fish were placed.

The bass fishing on the St. Lawrence river through the islands to Kingston, along the edge of Lake Ontario, through the Bay of Quinte, the Murray canal and Presqu' Isle bay to Lake Ontario, a distance of two hundred miles is very good, especially in the west half.

I wish to call your attention to a grievance our Canadian people have in this long distance in regard to a regulation respecting foreigners. A great many foreigners come in these waters with motor boats, and abuse the privilege contemplated by the regulation, which is intended to enable them on leaving the province for good to take with them to their homes the lawful catch of two days fishing, viz. : sixteen bass. They can fish the same day that they cross over from Canada on the American side of the line

9-10 EDWARD VII., A. 1910

and take as many more, and sell their fish on the United States side and return next day for two days more fishing. All these fish are taken out of the same water system while hundreds of Canadians cannot get bass to eat, as they have not the time to fish with rod and line themselves, and are not allowed under the regulations to buy them, while they are the most plentiful sport fish we have.

Salmon trout are again appearing in the Bay of Quinte after an absence of twenty-five years. This is no doubt due to the deposits of fry from the Newcastle hatchery. It is claimed that these fish were driven from these waters years ago owing to the contamination caused by sawdust and mill rubbish carried into them by the tributary rivers; but as these are now all free of such pollution the salmon-trout now remain in

the bay the year round.

The whitefish and herring are more plentiful in Lake Ontario and Bay of Quinte than ever before, and can now be caught nearly the whole year round. This is generally conceded to be due to the fact of their greater plentifulness in these waters, owing to their being stocked with fry from year to year from the Sandwich Hatchery.

The herring are of a larger species than formerly, and have almost doubled in size

in the last five years.

The fishermen are observing the laws better, as they understand the regulations are for their benefit, and fish are becoming more plentiful and the home market better. In fact everything is more satisfactory.

In the past the rivers were largely utilized by the lumbermen for log driving, and the dams used by them in such connection were opened each season after the drive,

leaving the fish free access up the streams.

Now, however, power companies are taking over these small dams, and replacing them by high ones right across the streams, without in some instances providing them

with fishways as contemplated by the Fisheries Act

I have, however, visited several of these power companies this season, and have arranged for fishways to be put in where necessary. In my jugdment some do not need fishways. Where a dam is built between two large lakes the lower lake may have a swampy sandy bottom containing fish that would be injurious to the fish in a lake farther up, with a rocky bottom and clear spring water. I am preparing a report on dams in the several rivers in my district which will deal fully with the matter.

There are several private trout ponds in my district to which my attention has been called. The owners of the ponds have spent thousands of dollars making and maintaining them, and breeding the trout, and I think they should be allowed to keep them from running up stream on other people's properties who have done nothing to develop, or in any way assist the industry. This is a matter the government should look into, as the law governing the streams was enacted before these conditions existed.

Respectfully submitted,

Your obedient servant,

J. M. HURLEY,

Inspector.

REPORT OF INSPECTOR O. B. SHEPPARD, WHOSE DISTRICT LIES WEST OF THE EASTERN BOUNDARIES OF ONTARIO COUNTY, AND THE DISTRICTS OF MUSKOKA AND PARRY SOUND ALONG THE MATTAWA AND OTTAWA RIVERS AND NORTHWARD ALONG THE NORTH EASTERN BOUNDARY LINE TO JAMES BAY.

OFFICE OF THE INSPECTOR OF FISHERIES.

TORONTO, 1909.

R. N. VENNING, Esq., Superintendent of Fisheries, Ottawa.

DEAR SIR,—The commercial fishing in mý division this season as far as I can learn from my visits to the various localities shows a diminution from last season. This is only what can be expected when the large number of licenses granted is taken into consideration, and unless some very drastic course is taken at once, to prevent especially the parent fish from being taken on their spawning grounds, this diminution will continue from year to year until the catch will be practically useless for commercial purposes.

I would suggest calling a meeting of the principal fishermen at some central point and taking up the whole matter for discussion. In this way the facts could be ascer-

tained and probably a remedy suggested.

A great many requests have been made this season for fishways in dams in various localities and in many cases they have been ordered put in, but after giving this matter the most careful attention and study, I cannot help but come to the conclusion that in a great majority of cases the putting in of the fishways is a positive injury rather than a benefit for the following reason: -In the last few years, carp, suckers and mullet which are not desirable food fish have largely increased both in inland and international waters. The fishways give these undesirable fish a chance to ascend the streams and destroy all the ova of the game fish which exist there and thus do a positive and incalculable damage. To my mind it would be very much more in the interest of the fisheries to let the dams remain as barriers to keep the undesirable fish from ascending the streams and as far as possible re-stock the streams with fish that are suitable to the various streams. How to keep the carp especially out of the waters where they have not as yet gained a foothold is an important question, and to my mind the dams where they exist should be kept intact as a preventive, as when they once get into a lake or chain of lakes, nothing can stop their increase, which means in time a practical extermination of our other fish as well as the rice and other food of the wild fowl. This, I think, deserves careful attention and thought.

The rod and line fishing in my division this season in most cases shows a falling off, while in a few places it has been particularly good. But greater care should be taken

to see the law enforced particularly as to the taking of small fish.

All of which is respectfully submitted,

Your obedient servant,

O. B. SHEPPARD,

Inspector of Fisheries.

9-10 EDWARD VII., A. 1910

## SAULT STE. MARIE, 1909.

R. N. Venning, Esq., Superintendent of Fisheries, Ottawa.

Sir,—I have the honour to submit my annual report of the fisheries in my division, being the north-western division of the province of Ontario, for the fiscal year from the

1st April, 1908, to 31st March, 1909.

Notwithstanding the fact that the Ontario government have increased the number of yards of gill-nets on the tug licenses and sail boat licenses in Lake Superior, from 448,800 yards in 1906, to 811,000 yards in 1908, and in Lake Huron and North channel from 879,800 yards in 1906 to 1,141,250 yards in 1908, there is still a decrease in the catch of the principal food fish, whitefish and trout, compared with last year. In Thunder bay and Lake Superior the catch of whitefish was 420,700 lbs. in 1907. Trout, the catch was 1,743,150 lbs. in 1907, and in 1908 the catch of whitefish was 361,587 lbs. Trout in 1908, the catch was 1,305,270 lbs. in Lake Huron and the North channel, the catch of whitefish was 879,500 lbs. in 1907, and trout, the catch was 1,997,200 lbs in 1907, and in the season of 1908 the catch of whitefish was 657,967 lbs. Trout the catch was 1,689,434 lbs. There is a steady decrease each year of whitefish and trout in the east end of Lake Superior and the south side of the Manitoulin Islands in Lake Huron, and in my opinion the cause is overfishing with small mesh nets and the fisherman still fish more nets than they hold a license for, notwithstanding that the Ontario government increased the number of yards of gill-net this season,

About 95 per cent of the fish caught in my division are exported to the United

States.

There has been a good deal of illegal fishing carried on by American fishermen on the east end of Lake Superior and the south side of the Manitoulin Islands in Lake Huron, and it will require a fast tug and launch both on these waters to put a stop to this illegal fishing in Canadian waters.

In my division, there has also been a good deal of illegal fishing with-trap nets and seines in the waters east from Little Current to Bustard islands by Canadian fishermen.

The Ontario fishery officers have seized quite a number of these nets, but from information received by me those violators of the law replaced other trap-nets in the waters where the other nets were seized, and it will require a steady patrol of these waters to stamp out this illegal fishing.

The close season has been fairly well observed this year by the licensed fishermen. I have received no complaints re sawdust and mill refuse being put into the waters

in my division this season.

I have devoted my attention this season to the fisheries on the east end of Lake Superior and east from the Soo to Bustard islands in Lake Huron and I refrain from making any recommendations re the fisheries this season, believing that the Commission appointed by your government to investigate the fisheries and inquire into the vexed questions of pound-nets, seines, traps and gill-nets, will fully do so.

I have also in addition to my fishery duties looked after the placing of the buoys

on the east end of Lake Superior, and east from the Soo to Bruce Mines.

I have the honour to be, sir,

Your obedient servant,

A. G. DUNCAN,

Inspector of Fisheries.

# STATISTICS FOR ONTARIO

# 9-10 EDWARD VII., A. 1910 ONTARIO

RETURN of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during

=											Fishing
	District.	Т	ugs an	d Vessels	· · · · · · · · · · · · · · · · · · ·		Boats.			Gill-N	ets.
Number.		No.	Ton- nage.	Value.	Men.	No.	Value.	Men.	No.	Yards.	Value.
	Lake of the Woods and Rainy River.			. \$ cts.			\$ cts.			,	\$ cts.
2 3 4 5 6	Lake of the WoodsShoal LakeWabigoon and Mimitakie. VermilionEagle and Pelican. Sandy, Abraham and LongRainy and Kariskong	····i	75	700,00	• • • •	9 3 2 3 3 9	2,225 00 770 00 225 00 550 00 800 00 475 00 1,725 00	8 3 6 8 6		12,000 6,000 4,000 6,000 10,000 8,000 26,000	1,755 00 1,025 00 600 00 900 00 1,550 00 1,250 00 3,900 00
	Totals	3	225	5,800 00	8	32	6,770 00	76		72,000	10,980 00

# RETURN of the kinds, quantities and values

Number.	District.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike.
	Lake of the Woods and Rainy River.	brls.	lb.	brls.	lb.	brls.	. 1b.	lb.
2 3 4 5 6	Lake of the Woods Shoal Lake. Wabigoon and Minitakie. Vermilion Eagle and Pelican. Sandy, Abraham and Long Rainy and Kariskong				160,195 8,200 10,800 79,100 15,000		7,100 6,025	111,889 36,750 2,400 6,100 11,900 15,100 46,360
	Totals				694,347		32,336	230,499
	Values	\$ cts.	\$ cts.	\$ cts.	\$ ets. 69,434 70		\$ cts. 4,233 60	\$ cts. 18,439 92

## FISHERIES.

the quantity and value of all Fishing Materials and other Fixtures employed in the the year 1908.

MATERIAI	Ĺ.											О	ther Fix in Fis		
Sein	103.	Po	und Nets.	В	loop Nets.	)i	p Nets	Night	Lines.	5	Spears.	á	reezers and Ice Houses.		Piers and Wharfs.
o Yds.	Value.	No.	Value.	No.	Value.	TAO.	Value	No. Hooks	Value.	No.	Value.	No.	Value.	No.	Value.
	\$		\$ cts.		\$ cts.		\$		\$		\$		\$ cts.		\$ cts.
••		14	3,000 00		575 00 .							4	5,500 00		
						• 1									
						. !									
						•							300 00		
													1,600 00		
		14	3,000 00	3	575 00 .	-		. ,		-		_ 14	7,450 00	-	

# of Fish caught during the Year 1908.

Pickerel or Doré.	Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Mixed and Coarse Fish.	Caviare.	Sturgeon Bladders.	Carp.	Value.
lbs.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	No.	lb.	\$ cts.
1,500 10,780 19,700 11,040 76,250				2,300 $150$ $2,230$						76,338 63 19,019 50 1,950 00 3,386 50 11,661 00 4,051 80 25,074 58
295,551	55,885			75,403	27,847	45,200	3,250	290		141,482 01
\$ cts. 29,555 10				\$ cts. 4,524 18						\$ cts. 141,482 01

9-10 EDWARD VII., A. 1910 ONTARIO

Return of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, Fishing Industry during

	•												Fishing
	District.		Tug	s or Ves	sels.			Boats.				Gill I	Nets.
Number.		Number.	Tonnage.	Value	е.	Men.	Number.	Value.		Men.	Number.	Yards.	Value.
1 2 3 4 5 6 7	Gros Cap Michipicoten Island Gargantua Goulais Bay Batchewana	3 2	30	11,00 15,00	00 00 00 00	19 18	8 4	915 150 175 435 900 475	00 00 00 00	4 4 6 15 6			8,000 00 6,250 00

# RETURN of the Kinds, Quantities and Values

Number.	District.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike,
	Lake Superior.	brls.	lb.	brls.	lb.	brls.	lb.	lb.
1 2 3 4 5 6 7	Thunder Bay Point Mamainse Gros Cap. Michipicoten Island Gargantua Goulais Bay Batchewana Bay				28,455 34,195 5,800	3,200	200,235 289,295 9,800	
	Totals		353,905	5	361,587	3,312	1,305,370	68,677
	Values		\$ cts. 17,695 25	\$ cts. 50 00	7\$ cts. 36,158 70			

# SESSIONAL PAPER No. 22 FISHERIES.

the Quantity and Value of all Fishing Materials and other Fixtures employed in the the Year 1908.

M	ATERIA	L																							Usi Usi	ED	URES	3
	Seir	nes.	P	our	ıd N	Vets			oor ets			Di Ne		Nig	ht	Li	nes	3.	s	pea	rs.		Fre and Ho	lIo	ce		Pierand And Thar	
Number.	Yds.	Value,	Number.		Value		Number.		Value.		Number.		Value.	Hooks.			Value.		Number.	Volue	value.	Number.		Value.		Number.	Value.	
		\$ cts			\$	cts			\$	cts.		\$	cts.			95	8 (	cts.		\$	cts.			\$	ets.		\$ c	ts.
			, 33		3,70	0 0	0							 	• •				ĺ			9	3,	610	00	2	125	00
									• • •																			
						• • •	20			0 00	٠.	•							• •					• • •				
			. 33	-	3,70	00 00	20	1,	.000	0 00				 					-			9	3,	610	00	2	125	00

# of Fish caught during the Year 1908.

Pickerel or Dore.	Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Mixed and coarse fish.	Caviare.	Sturgeon bladders.	Jarp.	Value.	Number.
lb. 100,622 35	lb. 3,575	lb.	lb.	lb.		lb. 3,450 4,000		Number		\$ cts. 142,942 56 1,105 10 32,210 00 23,085 30 32,403 00 2,620 00 965 00	1 2 3 4 5 6
\$ ets. 10,071 70	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ cts.		235,330 96 \$ cts. 235,330 96	

9-10 EDWARD VII., A. 1910 ONTARIO

# RETURN of the Number of Fishermen, Tonnage and Value of Tugs,

-											Fishing
	District.		Tugs	or Vessels			Boats.			Gill N	ets.
Number.		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Lake Huron (North Channel).  Thessalon St. Joseph Island Bruce Mines Mississauga Haywood Island Manitowaning Kagawong Badgley, Darch and Innis Islands Meldrum Bay Cockburn Island Fitzwilliam Island Squaw Island Duck Islands South Bay Mouth Killarney Providence Bay Cape Robert Bedford Island Point aux Grondine Green Island Green Island	1 1 1 3 1 1 1 4 4 2 2 2 1 1 1 1 1	15 15 677 200 200 833 400 440 355 15 200 88	2,700 00 2,500 00 1,000 00 15,000 00 5,000 00 3,000 00 16,500 00 5,000 00 5,000 00 5,000 00 5,000 00 5,000 00	5 5 5 44 188 6 6 6 6 23 100 100 9 4 6 6 4 4 4 4 4 4 6 6 6 6 6 6 6 6 6 6	1 2 1 4 13 4 6 6 6 13 7 2 1 1 1 5	\$ cts. 175 00 425 00 350 00 500 00 900 00 1,050 00 200 00 1,600 00 2,175 00 1,425 00 750 00 1,225 00 2,675 00 1,25 00 50 00 50 00 1,600 00	4 2 8 27 4 12 13 24 12 3 10		12,000 9,000 15,000 3,750 60,000 12,000 180,000 28,000 196,300 126,000 126,000 126,000 66,100 600 30,000	8,190 00 1,115 00 2,660 00 100 00 2,600 00

## FISHERIES.

vessels and boats, the quantity and value of all fishing material, etc.—Continued.

Seines.   Pound-nets.   Hoop-nets.   Dip-nets.   Night-lines.   Spears.   Freezers and lice houses.   Piers and wharfs.	MATERIAL.						OTHER FIXT IN FISH	
\$ cts.       \$ cts.	Seines.	Pound-nets.	Hoop-nets.	Dip-nets.	Night-lines.	Spears.		
13	Yards. Value.	Number.	Number.	Number.	Number of hooks.	Number. Value.	Number.	Number.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	\$ cts.	\$ ets.	. \$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
		13 2,800 00 4 1,000 00 7 1,400 00 10 2,000 00 10 2,000 00 10 2,000 00 10 1,750 00 10 2,000 00 10 1,500 00					1 250 00 1 400 00 1 200 00	
92 19 630 00 5 1,500 00		8 1,600 0	0					

9-10 EDWARD VII., A. 1910
RETURN of the Kinds, Quantities and Values of

Number.	District.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike.
	Lake Huron (North Channel).	Brls.	Lb.	Brls.	Lb.	Brls.	Lb.	Lb.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Thessalon. St. Joseph Island. Bruce Mines. Mississauga. Haywood Island. Manitowaning. Kagawong. Badgeley, Darch and Innis Islands. Meldrum Bay. Cockburn Island. Squaw Island. Squaw Island. South Bay Mouth. Killarney. Providence Bay. Cape Robert. Bedford Island. Point aux Grondine. Green Island. Totals.	11	1,000	16	1,628 100 26,000 9,036 30,155 33,353 76,702 96,000 42,485 35,500 91,800 12,400 39,078 131,602 7,500 16,450 5,055	27 10	175,445 166,920 244,359 328,000 114,936 96,541 17,068	525 10,303 5,595 890 
	Values	\$ ets. 110 00	\$ ets. 500 00	\$ cts. 160 00	\$ cts. 65,796 90	\$ cts. 490 00	\$ cts. 168,943 40	\$ cts. 3,655 52

SESSIONAL PAPER No. 22 fish caught during the year 1908—Continued.

Pickerel or dore.	Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Mixed and coarse fish.	Caviare.	Sturgeon bladders.	Carp.	Value.
lb.	1b.	lb.	lb.	lb.	lb.	lb.	lb.	No.	lb.	\$ cts.
475 1001 3001 11,000 14,174 15,375 1,570 23,858 2,000 100 59,001 6,516 34,481	4,500 532 1,270 4,655 585 5,202		526 1,000			300 20,000 289 695 2,772 4,000 10,000 20,274	20			269 00 1,279 40 352 00 5,575 00 3,882 19 6,212 35 10,694 40 12,389 25 37,000 00 22,073 00 1 20,562 00 33,615 90 34,040 00 15,702 18 24,100 65 10,676 34 11,120 00 3,266 25 6,571 36 5,000 00
168,950	24,907		1,526			75,662	235			264,381 27
\$ cts. 16,895 00			\$ ets. 76 30			\$ cts. 3,783 10				\$ cts. 264,381 17

9-10 EDWARD VII., A. 1910

ONTARIO

# RETURN of the number of fishermen, tonnage and the value of tugs,

											Fishing
	District.		Tug	gs or vessel	8		Boats.			Gill-ne	ets.
Number.		Nur ber.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value,
2 3 4 5	Georgian Bay.  Parry Sound. Waubaushene Penetanguishene Collingwood Meaford Byng Inlet. Colpoy's Bay & Tobermory Totals.	1 7 4	85 2  20 135 260 100 602	\$ cts. 23,000 00 140 00 2,500 00 18,900 00 6,800 00 18,100 00 69,440 00	5 28 17 36	16 15 21 13 11 52	\$ cts. 2,625 00 1,840 00 945 00 2,270 00 1,045 00 810 00 4,402 00 13,937 00	27 31 30 42 29 23 98 ———————————————————————————————————		398,000 52,000 31,445 133,000 334,000 192,000 453,600	2,880 00

# RETURN of the kinds, quantities and values of

-								
Number.	District.	Herring, salted.	Herring, fresh.	Whitefish, salted	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike,
	Georgian Bay.	brls.	lb.	brls.	lb.	brls.	lb.	lb.
3	Parry Sound Waubaushene Penetanguishene Collingwood Meaford	$\frac{41\frac{1}{2}}{106}$		22 75	241,636 15,600 10,905 20,860	177	17,200 25,460 69,407	26,900 1,150
- 6	Byng InletColpoy's Bay & Tobermory	25	7,145		233,135 7,946		90,409	8,894
	Totals	$\frac{224\frac{1}{2}}{2}$	51,745	100	530,082	338	1,154,884	40,184
	Values	\$ cts. 2,245 00	\$ cts. 2,587 25	\$ cts. 1,000 00	\$ cts. 53,008 20	\$ ets. 3,380 00	\$ ets. 115,488 40	\$ cts. 3,214 72

## FISHERIES.

vessels and boats, the quantity and value of all fishing material, etc.—Continued.

Мать	ERIAL.																			Other fixt	ure		i.
Se	ines.	Po	und	N	ets.	Н	oop	N	ets.	]	Dip	Ne	ts.	Nigh	t Li	nes.	S	pears.		eezers and e houses.	.   ]	Piers and wharfs.	
Number.	Value,	Number.		Value.	,	Number.		Value.		Number.		Value.		Number of hooks.	Volue	v arne.	Numper.	Value.	Numper.	Value.	Number.	Value.	Number.
	\$ cts.	11			cts.			\$	cts.			\$	ets.	200		cts.		\$ ets.	5 2 1 1 7	\$ cts 250 0 250 0 250 0 300 0 3,500 0	0 4		00
		11	4	,80	0 00									200		2 00		, . ,	16	4,300 (	0 8	1,668 0	0.

fish caught during the year 1908—Continued.

Pickerel or Dore.	Sturgeon.	Eels.	Perch.	Tullibee.	Catfish,	Mixed and coarse fish.	Caviare.	Sturgeon bladders.	Carp.	Value.
Lbs.	Lb	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	No.	Lb.	\$ ets.
2,178 9,800						9,700 120			1,600	48,045 40 7,163 00 6,813 00
						8,220				14,252 70 32,890 00
19,109	1,144						190			35,713 42 42,216 25
31,087	5,510		6,320		175	20,540	846		1600	187,093 77
\$ cts. 3,108 70		\$ cts.		\$ cts.	\$ cts. 14 00		\$ cts. 846 00	\$ cts.		

# 9-10 EDWARD VII., A. 1910 ONTARIO

# RETURN of the number of fishermen, tonnage and value of tugs,

								2,000			FISHING
	District.		Tugs	or vessels.			Boats.			Gill-n	ets.
Number.		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men:	Number.	Yards.	Value,
	Lake Huron (proper).			\$ cts.			\$ cts.				\$ cts.
2 3	Cape Hurd to Southampton Southampton to Pine Point County Huron County Lambton, including St. Clair River	9 2 2	201 2,980 16		11	35 8 18 62	1,050 00 2,465 00	13 35		588,400 156,175 176,000 75,000	27,410 00 2,090 00 3,500 00 275 00
	Totals	13	3,197	42,000 00	69	123	18,495 00	233		995,575	33,275 00

# RETURN of the kinds, quantities and values of

Number.	District.	Herring, salted.	Herring, fresh.	Whitefish, salted,	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike.
	Lake Huron (proper).	Brls.	Lb.	Brls.	Lb <sub>''</sub>	Brls.	Lb.	Lb.
$\frac{2}{3}$	Cape Hurd to Southampton Southampton to Pine Point County Huron	15	1,000	3,315	6,787 950 39,855	25	662,319 175,800 95,552	
- 1	St. Clair River	10	234,772		124,700		18,724	2,735
	Totals	519	270,257	3,515	172,292	868	952,395	10,615
	Values	\$ cts. 5,190 00	\$ cts. 13,515 85		\$ cts. 17,229 20		\$ ets. 95,239 50	\$ cts. 849 20

SESSIONAL PAPER No. 22 Continued,

Vessels and Boats, the quantity and value of Fishing Material, &c.—Continued.

ΜA	TERI	AL.											От	HER FIXT		
_	Sei	nes.	Pou	and Nets.		Hoop Nets.	Di	ip Nets.		ight nes.		Spears.		Freezers and e Houses.		Piers and Vharfs.
Number.	Yards.	Value.	Number.	Value.	Number.	Value.	Number.	Value,	Number Hooks.	Value.	Number.	Ýalue.	Number.	Value.	Number.	Value.
		\$ cts.		\$ cts.		\$ cts.		\$ ets.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
			2				3				8	8 00	7 2	3,250 00 500 00	)	
			10	6,650 00		,	4	4 00					6	700 00	)	
2	648	495 00	31	8,550 00	1	25 00			500	5 00			1	200 00	)	
12	648	495 00	43	15,700 00	1	25 00	7	7 00	500	5 00	8	8 00	16	4,650 00	)	

# Fish caught during the Year 1908—Continued.

Pickerel or dore.	Sturgeon,	Eels.	Perch.	Tullibee.	Catfish.	Mixed and coarse fish.	Caviare,	Sturgeon bladderers.	Carp.	Value.	Number.
1b.	1b.	lb.	Ib.	lb.	lb	. lb.	lb.	no.	lb.	\$ cts.	
48			25,734	17,443		800	148		•••••	119,976 91 18,125 00	
11,490	1,653		60,310	1,000	305	40,014	88			20,460 67	
310,187	13,040		10,232	28	356	'98,809	914	291	1,000	65,965 31	4
321,725	14,693		96,276	18,471	661	139,623	1,150	291	1,000	224,527 89	9
\$ cts. 32,172 50	\$ cts. 2,203 95	\$	\$ cts. 4,813 80	\$ cts. 1,108 26		\$ cts. 6,981 15	\$ cts. 1,150 00	\$ ets. 174 60	\$ cts. 20 00	224,527 89	9

9-10 EDWARD VII., A. 1910

Return of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, Fishing Industry during

=											
										F	'ISHING
	District.		Tugs	or Vessels			Boats.		6	ill N	lets.
Number.		Number.	Tonnage.	Value.	Men.	Number,	Value.	Men.	Number.	Yards.	Value.
	Lake St. Clair.			\$ cts.			\$ cts.				\$ cts.
2	River Thames Lake St. Clair. Detroit River.	10		2,425 00	20	117 34		37 190 95			
	Totals	10		2,425 00	20	151	8,871 00	322			

# RETURN of the Kinds, Quantities and Values of

Number.	District.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike.
	Lake St. Clair.	brls.	lb.	brls.	lb.	brls.	lb.	lb.
2	River Thames Lake St. Clair. Detroit River.		1.000		29,575 24,325			27,909 13,313
	Totals		1,000		53,900	>		41,222
		\$ cts.	\$ cts.	\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ cts.
	Values		50 00		5,390 00			3,297 26

SESSIONAL PAPER No. 22

the Quantity and Value of all Fishing Materials and other Fixtures employed in the the Year 1908.

Ma'	TERIAL.										O:	THER FIXTU FISH		
	Sein	es.	Po	ound Nets.	Ho	oop Nets.		Dip Nets.	Night	Lines.		Freezers and Ice Houses.		Piers and Wharfs.
Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number hooks.	Value.	Number.	Value.	Number.	Value.
		\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
47 33	8,291 3,027	2,770 00 1,399 00	12	2,200 00	156	7,970 00	37	55 00	4,950				-	
80	11,318	4,169 00	12	2,200 00	156	7,970 00	37	55 00	4,950	87 50	10	2,900 00	12	1,950 00

Fish caught during the Year 1908.

Pickerel or dore.	Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Mixed and coarse fish.	Caviare,	Sturgeon bladders.	Carp.	Value.
Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	No.	Lb.	\$ ets.
5,528 63,634 6,245	33,975 700		72,040 3,665		68,999 350	7,195 588,809 41,930	1,366		60,552 2,000	912 55 57,839 28 6,574 79
75,407	34,675		75,705		69,349	637,934	1,366		62,552	65,326 62
\$ ets.	\$ cts.		\$ cts.		\$ cts.	\$ ets.	\$ cts.	\$ ets.	\$ cts.	\$ cts.
7,540 70	5,201 25		3,785 <b>2</b> 5		5,547 92	31,896 70	1,366 00		1,251 01	65,326 62

9-10 EDWARD VII., A. 1910

Return of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, Fishing Industry during

-		_									-
											Fishing
	DISTRICT,		Tug	gs or Vessels.			Boats.			Gill	Nets.
Number.		Number.	Tonnage.	Value.	Men.	Number.	.Value,	Men.	Number.	Yards.	Value,
3 4 5 6 7 8 9 10 11 12 13	Elgin East Houghton. Walsingham. Long Point. Charlotteville. Inner Bay Woodhouse. Haldimand Pt. Maitland to Pt. Colborne Pt. Colborne to Niagara Falls.	2 3 1  3 6 9	84 118 43	14,000 00 13,100 00 42,650 00 10,000 00 13,000 00 9,000 00 12,000 00 19,000 00 6,762 00	6 10 16 81 13 18 9 	16 11 32 16 12 23 6 33 9 25	9,730 00 16,265 00 705 00 9,600 00 470 00 496 00 1,341 00 165 00 1,180 00 127 00 650 00	67 122 6 56  34 25 53 16  74 9 29		22,000 11,500 16,000 122,000 22,000 24,000 13,000 10,000 32,000 40,000 93,000 37,570 48,400	\$ cts. 2,100 00 1,800 00 3,800 00 13,360 00 1,500 00 750 00 750 00 90 00 3,200 00 1,633 00 5,466 00 824 00
	Totals	44	1,396	149,012 00	224	291	42,654 00	529		493,470	48,290 00

# RETURN of the kinds, Quantities and Values of

=			1111101	OI OI	Kinus,	Quant	ities and	d Values of
Number.	DISTRICT.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike,
	Lake Erie.	Brls.	Lb.	Brls.	Lb.	Brls.	Lb.	Lb.
3 4 5 6 7 8 9 10 11 12 13	Pelee Island Essex County Kent County Elgin West Elgin East Houghton Walsingham Long Point Charlotteville Inner Bay Woodhouse Haldimand Pt. Maitland to Pt. Colborne Pt. Colborne to Niagara Falls	1 1	1,708,750 1,595,792 482,000 187,720 67,000 15,746	2	176,974 71,586 24,171 68,800 38,753 27,100 	231	504	33,700 191,545 886 637
	Totals	2	5,300,415	2	826,189	231/2	3,884	1,407,562
	Values\$	20 00	265,020 75	20 00	82,618 90	235 00	388 40	112,604 96

the Quantity and Value of all Fishing Materials and other Fixtures employed in the the Year, 1908.

MΑ	TERIAL.										Отн	FISHI		SED IN
	Sein	es.	Po	ound Nets.		Hoop lets.		Dip Nets.	Night	Lines.		ezers and Houses .		ers and harfs.
Number.	Yards.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number hooks.	Value.	Number.	Value.	Number.	Value,
		\$ cts.		\$ cts.		\$ cts.		\$ cts.		cts.		\$ cts.		\$ ets.
5 2 8 1  19 6 11 8	266 2,400 3,200 1,080 2,660 1,100	320 00 705 00	54	23,050 00 48,850 00 23,800 00	3		8		200		37 17 28	1,200 00 7,420 00 27,220 00 6,875 00 10,900 00		
			24		5		1 0	9 50	500		14		1	
60	10,706	3,855 00	272	106,825 0	3		. 88	53 0	8,300	92 50	128	62,940 00	1	100 00

# fish caught during the year 1908.

Pickerel or dore.	Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Mixed and coarse fish.	Caviare,	Sturgeon bladders.	Carp.	Value.	Number.
Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	
5,350 70,545 176,764 282,346 623,200 7,368 55 44,214 1,612 245,355 379,432	2,200 7,695 20,917 4,110 47,308 4,729		2,500 78,159 233,853 93,607 42,300 19,806 37,489 223 27,374 699 4,275 61,726 19,606 8,803		836 4,732 1,406 300 885 	40,471 15,958 14,620	718 373 193 935		26,500 103,370 109,795 2,500 6,065 42,750 30,275 1,462 287	63,404 204,864 121,111 98,242 23,725 12,134 2,609 13,457 1,372 40,362 87,035 31,396 6,237	31   2 24   3 55   4 30   5 32   6 45   6 51   9 02   10 45   11 15   12 24   13 45   14
1,855,661	107,823		630,420		18,591	500,107	3,000	9	328,879	730,244	17
185,566 10			31,521 00		1,487 28	25,005 35	3,000 00	5 40	6,577 58	730,241	17

9-10 EDWARD VII., A. 1910

RETURN of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats,
Fishing Industry during

-											Fishing
	District.	T	'ug	s or Vessel	s.		Boats.	1		Gill 1	Vets.
Number.		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value.
2 3 4 5 6 7	Luke Ontario.  Lincoln. Wentworth. Halton and Peel York Ontario. Durham Northumberland.		• •		٠.	61 21 22 15 6 3 12	495 00 5,295 00 2,725 00	81 28 47 25 12 4 14		94,050 59,900 123,000 43,100 7,500 3,850 34,200	\$ cts.  5,830 00 3,952 00 5,855 00 3,430 00 380 00 410 00 2,950 00
10	Prince Edward Bay of Quinte Amherst Island Wolfe Island and vicinity  Totals				11	62 114 44 20 380	9,290 00 5,328 00 1,580 00 780 00	121 194 54 34		72,600 62,750 27,100 3,100 531,150	3,675 00 3,252 00 1,680 00 26C 00 31,680 00

# RETURN of the Kinds, Quantities and Values of

Number.	District.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Witefish, fresh.	Trout, salted.	Trout, fresh.	Pike,
1	Lake Ontario.	Brls.	Lb.	Brls.	Lb.	Brls.	Lb.	Lb.
2	Wentworth				51,167 56,750		$14,700 \\ 36,200$	4,130 22,300
3	Halton and Peel		380,000		3,000		21,000	400
4	York		24,800		7,610		14,342	580
8	Ontario				4,385		918	597
7	Durham Northumberland				1,000		2,000	140
8	Prince Edward				17,924 $227,610$	• • • •	26,234	18,629
9	Bay of Quinte	906	22 714	12	202,042		40,651 $2,020$	21,600 87,925
10	Amherst Island	/	3 139	100	199,709		18,219	8,098
11	Wolfe Island and vicinity				2,200	5		18,795
	Totals	906	1,140,784	112	773,397	5	176,284	183,194
	Values\$	9,060 00	57,039 20	1,120 00	77,339 70	50 00	17,628 40	14,655 52

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the Quantity and Value of all Fishing Materials and other Fixtures employed in the the Year 19.8.

M	ATERI	IAL.											O	THER FIX	TURE ISHIN	S USED
-	Sei	nes.		Pound Nets.	Hoo	op Nets.	Di	p Nets	Night	Lines.	S	pears.		eeezers and Houses.	7	Piers and Vharfs.
Number.	Yards.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	No. Hooks.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
		\$ cts.	ļ.,	\$ ets.		\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
2		50 00				140 00 4,570 00		157 75	200 600 200	2 00	123	153 00		675 00 1,390 00		162 00
5 -7	145  145	$\frac{140 \ 00}{190 \ 00}$	-		27 269	495 00 5,640 00	-	157 75	1,750	43 00	123	153 00	40	2,795 00	123	162 00

# Fish caught during the Year 1908.

Pickerel or Doré.	Sturgeon.	Eels,	Perch.	Tullibee.	Catfish.	Mixed and coarse fish.	Caviare.	Sturgeon Bladders.	Carp.	Value.
Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	No.	Lb.	\$ cts.
83,207 1,750 134 49		1,350 2,300 330 600 -400	2,500 600 565 135		4,963	4,160 5,145  23,747				30,717 89 33,004 50 21,514 80 3,731 25 1,216 96 957 20 9,020 33
1,800 32,374 19,407		4,200 6,155	3,100 54,993 6,886		6,300 175,739 2,500 26,175	3,078 127,188 1,400 19,127			2,900 2,100	30,048 15 64,572 77 26,156 34 5,816 45
138,721	2,325	22,335	88,680	1,000	230,904	220,185			16,365	226,756 64
13,872 10	348 75	1,340 10	4,434 00	60 00	18,472 32	11,009 25		• • • • • • • • • • • • • • • • • • • •	327 30	226,756 64

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RETURN of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, Fishing Industry during

						,-					Fishing
	District.	Г	ugs (	or Vessels	3.		Boats.			Gill N	et.
Number.	(	Number.	Tonnage.	Value.	Men.	Number.	Value,	Men.	Number.	Yards.	Value.
	Inland Waters.			\$ ets.			\$ ets.				\$ cts.
2 3 4 5	Frontenac County Leeds, Lanark, Lennox & Addington Russell, Prescott, Carleton, Renfrew Simcoe Welland Temiscamingue	2	1	50 00		90 37 69 3 2 2	1,041 00 358 00 715 00 55 00 20 00 550 00	69 86 5	, , ,	4,620 750 1,915 4,500	149 00 224 00
	Totals	2	1	50 00	2	203	2,739 00	301		11,785	1,189 00

# RETURN of the Kinds, Quantities and Values of

Number.	District.	Herring, salted.	Herring, fresh.	Whitefish, fresh.	Trout, fresh.	Pike,
	Inland Waters.	Brls.	Lb.	Lb.	Lb.	Lb.
2 3 4 5	Frontenac County Leeds, Lanark, Lennox & Addington Russell, Prescott, Carleton, Renfrew Simcoe Welland Temiscamingue		5,300	235 895	15	30
	Totals	29	12,720	6,880	15	51,954
	Values \$	290 00	636 00	688 00	1 50	4,156 32

the Quantity and Value of all Fishing Materials and other Fixtures employed in the the year 1908.

M	ATERIA	L.											0	THER FIX		
***	Seir	ies.	Po	ound Nets.	В	Ιοορ Nets.	Di	p Nets	Nigh	t Lines.		Spears.	8	reezers and Ice Houses.		iers and Wharfs.
Number.	Yards,	Value.	Number.	Value.	Number.	Value,	Number.	Value.	Number of Hooks.	Value.	Number.	Value.	Number.	Value,	Number.	Value.
0)		\$ cts.	7	\$ cts.	34	\$ cts.		\$ cts.		\$ cts.	]	\$ ets.		\$ cts.		\$ cts.
8	:	50 00			59	755 00 885 00		19 00	400	4 90	• •		6	600 00		
							8	8 00	5,650				1	30 00		
									900							
							2	6 00					1	15 00		
٠.	3 * 1 *				• •		٠.						, ,			
14		115 00		* * * * * * *	93	1,640 00	25	29 00	6,950	120 00			8	750 00	. ,	

fish caught during the year 1908.

Pickerel or doré	Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Mixed and coarse fish.	Caviare.	Sturgeon blabders.	Carp.	Value.
Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	No.	Lb.	\$ cts.
$\begin{array}{c} 225 \\ 3,000 \\ 7,022 \end{array}$	5,035	450 50			28,034 42,717 13,800	6,140			5,672	10,357 73 5,479 44 5,741 12 91 00
$\frac{25}{7,800}$	200		3		10,012	100 9,000				811 01 2,455 00
18,072	5,235	500	16,421	2,000	94,563	158,076			6,557	24,935 30
1,807 20	785 25	30 00	821 05	120 00	7,565 04	7,903 80			131 14	24,935 30

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Recapitulation of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and the Fishing Industry

									Fishing
DISTRICT.	Tugs or Vessels.					Boats.	Gill-Nets.		
Number.	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Yards.	Value.
Lake of the Woods and Rainy River	3 23	250 144	\$ cts.  5,800 00 50,450 00	8 108	32 50	\$ ets. 6,770 00 3,070 00	76 75	72,000 811,000	
2 Lake Superior. 3 Lake Huron (North Channel). 4 Georgian Bay 5 Lake Huron (Proper) 6 Lake St. Clair and	21 26	393 602 3,197	73,300 00 69,440 00 42,000 00	110 118	84 143 123	16,729 00 13,937 00 18,495 00	149 280 233	1,141,250 1,594,045 995,575	81,119 00 64,477 00
River Thames 7 Lake Erie 8 Lake Ontario 9 Inland Waters	10 44 5	1,396 60	2,425 00 149,012 00 4,700 00	224	151 291 360 205	8,871 00 42,654 00 30,802 00 2,789 00	322 529 580 351	493,470 528,050 11,785	31,414 00
Totals	145	6,062	397,127 00	668	1,439	144,117 00	2,595	5,647,175	306,424 00

# Recapitulation of the kinds, quantities and values of

Number.	District.	Herrings, salted.	Herrings, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout salted.	Trout, fresh.	Pike.
		Brls.	Lb.	Brls.	Lb.	Brls.	Lb.	Lb.
2	Lake of the Woods and Rainy River. Lake Superior Lake Huron (North		353,905		694,347 361,587	3,312	32,336 1,305,370	230,499 68,677
	Channel)	11	10,000	16		49	1,689,434	
	Georgian Bay	$224\frac{1}{2}$	51,745	100	530,082	338	1,154,884	40,184
6	Lake Huron (Proper) Lake St. Clair and River Thames	519	270,257 1,000	3,515	53,900		952,395	41,222
	Lake Erie	2	5,300,415	2	826,189	$23\frac{1}{2}$		
	Lake Ontario	906	1,140,784			5	176,284	
9	Inland Waters	29	12,720		6,880		15	51,954
	Totals	1,691½	7,140,826	3,750	4,076,643	$4,595\frac{1}{2}$	5,314,602	2,079,601
	Values	16,915 00	357,041 30	37,500 00	407,664 30	45,955 00	531,460 20	166,368 08

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Boats, the Quantity and Value of all Fishing Materials and other Fixtures employed in during the Year 1908.

MAT	rerial.												От	HER FIXTU FISH			
	Seine	S.		ound ets.		oop ets.	— Dip	Nets.	Night	Lines.	Sp	ears.		reezers and e Houses.	-	Piers and Wharfs.	
Number.	Yards.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number of Hooks.	Value.	Number.	Value.	Number.	Value,	Number.	Value,	Number.
		\$ ets.		\$ cts.		\$ ets.		\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.	
			14 33	3000 3700	3 20	575 1000							14 9	7450 3610	··· <u>·</u>	125	1 2
12	648	495	92 11 43	19630 4800 15700		25	7	7 00	200 500		8	8	5 16 16	1500 4300 4650		1668	345
	11,318 10,706			2200 106825		7970 75 5145 1640	85 73	53 00 157 75	8,300 1,750	92 50	123	153	10 128 40 8	2900 62940 4300 780	1 123	100	7
	22,672		477	155855					22,650		ļ	161	246	92430	143	4005	

Fish caught during the Year 1908.

Pickerel or doré.	Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Mixed and coarse fish.	Caviare.	Sturgeon bladders.	Carp.	Value,	Number.
Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Num- ber.	Lb.	\$ cts.	
295,551 100,717 168,950 31,087 321,725 75,407 1,855,661 138,721 18,072	$ \begin{array}{r} 34,675 \\ 107,823 \\ 2,325 \\ 5,235 \\ \end{array} $	22,235 500	1,526 6,320 96,276 75,705 630,420 88,680 16,421	18,471 1,000 2,000	175 661 69,349 18,591 230,904 94,563	45,200 7,450 75,662 20,540 139,623 637,934 500,107 220,185 158,076	235 846 1,150 1,366 3,000	9	1,600 1,000 62,552 328,879 16,365 6,557	141,482 01 235,330 96 264,381 27 187,093 77 224,527 89 65,326 62 730,244 17 226,756 64 24,935 30 2,100,078 63	2 3 4 5 6 7 8 9
3,005,891 \$ cts. 300589 10	\$ cts.	\$ ets.		\$ cts.	\$ ets. 35367 20	\$ cts.	\$ cts.	\$ cts. 354 00	\$ cts. 8339 06	\$ cts. 2,100,078 63	

STATEMENT of the Yield and the Value of the Flsheries of the Province for the year 1908.

Kinds of Fish.	Quantity.	Price.	Value.
Whitefish bbls. " lbs. Trout bbls. " bbls. " lbs. Herring bbls. Pickerel " lbs. Pickerel " " Sturgeon " " Caviare Bladders " " Eels " Perch " Catfish " Caarse Fish " Tullibee " Carp " Total increase, 1908.	3,750 4,076,643 4,595½ 5,314,602 1,691½ 7,140,826 3,005,891 2,079,601 254,628 9,847 590 22,835 915,348 442,090 1,804,777 118,464 416,953	0 10	\$ cts.  37,500 00  407,664 30  45,955 00  531,460 20  16,915 00  357,041 30  300,589 10  166.368 08  38,194 20  9,847 00  1,370 10  45,767 40  35,367 20  90,238 85  7,107 84  8,339 06  \$2,100,079 63

RECAPITULATION of the Fishing Tugs, Nets, Boats, etc., employed in the Province.

Articles.	Value.
145 tugs (6,062 tons), 668 men.  1,439 boats, 2,595 men  5,647,175-yards gill-net.  168 Seines, 22,672 yards.  477 pound nets.  227 dip nets.  227 dip nets.  12,650 hooks on set lines.  131 spears.  246 freezers and ice houses.  143 piers and wharfs.	\$ cts \$397,127 ( 144,117 ( 306,424 ( 8,684 (
518 hoop nets.	155,855 (
227 dip nets	16,430 (
2,650 hooks on set lines.	350 (
131 spears	161 (
240 freezers and tee houses.	92,430
146 piers and wharis	4,005

# APPENDIX No. 8.

# MANITOBA.

REPORT ON THE FISHERIES OF MANITOBA FOR THE YEAR 1908, BY THE INSPECTOR OF FISHERIES, WM. S. YOUNG.

> OFFICE OF THE INSPECTOR OF FISHERIES, SELKIRK, MAN., 1909.

To the Superintendent of Fisheries, Ottawa, Ont.

SIR,-I have the honour to submit my annual report on the fisheries of the province of Manitoba and Keewatin for the fiscal year 1908-9, and as requested, you will find the yield of the winter and summer fisheries on separate forms.

The Lake Winnipeg district is the only one in which both summer and winter

fisheries were operated during the year.

Fishing operations were carried on only during the summer season, in the Nelson river district, for barter or trade, any fish taken during the winter season were used entirely for home consumption by the settlers of the district. The action of the department in closing the waters of the Nelson river to whitefish fishing during the summer season will have a good effect on the fisheries of Lake Winnipeg; commercial fishing should not be allowed in the waters of the Nelson river. With feeders such as the Nelson river, the supply of whitefish for Lake Winnipeg is assured, but if these natural spawning grounds are allowed to be destroyed, the fisheries of Lake Winnipeg are bound to suffer.

Both the summer and winter seasons together gave a yield in value of fish to the

amount of six hundred thousand, three hundred and ninety six dollars.

The whitefish fishery of Lake Winnipeg during the summer season was all that could be hoped for, fish were abundant throughout the season in any part of the commercial waters, but averaging smaller in size; nine or ten years ago the whitefish of Lake Winnipeg averaged in weight from three to three and one eighth pound each, they now average about two and one-half pound.

There is a side to this question which is hard to explain. When the whitefish averaged three pound, a gill net of not larger than five inch in the mesh was used. At the present time no nets of a smaller mesh are used than five and one quarter inch, a large percentage are even larger than that, and yet the fish average smaller than the

fish that were produced by the smaller nets.

The winter fishery of Lake Winnipeg did not do as well as that of the previous The Dominion Fish Company being out of business was perhaps one cause, and also an over loaded market to contend with; the shortage is more noticeable in the pickerel fishery, which seemed to be very plentiful up to the time the ice formed, but after that they were very scarce and the fishermen were unable to locate them,

Referring again to the whitefish fishery of Lake Winnipeg. I would like to say that the sail boat fishermen make a profit for their summer's work of all the way from three to six hundred dollars, and in a few cases even better than that, so that while the whitefish average smaller than they did some years ago, they are undoubtedly on the increase. With our hatcheries in operation every season, and with the present restrictions on the commercial fisheries, I am satisfied that Lake Winnipeg has a good future ahead of it, and will continue to keep up its good name for both quality and quantity,

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The rest of the winter fisheries averaged up fairly well considering the state of the market, it being a most difficult matter to dispose of the fish after they had been produced.

Overseer W. H. Climie, reports as follows on the fisheries of Lakes Winnipegosis, Manitoba, Dauphin, Water Hen, Cedar, Moose and Comorant, for winter season

1908 - 9

Owing to whitefish being a smaller price on the market the past season than heretofore, the fishermen did not make their usual effort to produce them but sought after jack and pickerel.

I am given to understand that the fish caught on Lake Winnipegosis were larger in size this winter than the fish caught in past seasons, and I am also of the opinion that there are more fish in the lake to-day than there have been for some years.

The cause of this I attribute to summer fishing being discontinued on this lake for

the past three years.

The fishing at Whiskey Jack was very heavy this winter and this is also caused by the lake being closed for the past three summers.

The fishermen have I understand had a very successful winter and had whitefish

been their usual price the men all would have made good money.

Guardian J. Magnusson, reports as follows on the southern end of Lake Winnipeg. With reference to the condition of the fisheries, I beg to state that the summer or more correctly speaking the fall fishing was on the whole better than in previous years.

In winter caught fish there is a notable increase in whitefish, the increase I think may be attributed to the fish hatchery at Selkirk. Pickerel are rather decreasing, as winter fish, or at least it is so claimed by the fishermen, but in my opinion the mildness of the winter up to Christmas had something to do with the scarcity of fish up to that time.

On the whole, the condition of the fisheries is such that there is no reason to think that the lake will be depleted of fish, if the several close seasons are observed by the fishermen.

I have the honour to be, sir,

Your obedient servant,

W. S. YOUNG,
Inspector of Fisheries.

WINTER SEASON 1908-9.

RETURN Showing the Kinds and Quantities of Fish in the Districts' of Manitoba and Keewatin, Province of Manitoba by Fishery Overseer W. S. Young, at Selkirk Manitoba.

	Number.		12047	1	0
	VALUE.	e cts.	95486 00 101547 00 82946 00 12950 00 822 00		293745 00
	Caviare.	lb.	300	300	300
	Home consumption.	lb.	\$5000 175000 1760 200000 275000 250000 250000 8000 100000 100000 100000 100000 25000 25000 150000 30000 3000 150000 30000 3000 150000 3000 150000 3000 150000 3000 150000 3000 150000 3000 150000 3000 150000 3000 150000 3000 150000 3000 150000 30000 3000 3	335000 537000	16110
	Goldeyes.	lb.	275000	335000	9820 11725
	Mixed and coarse fish.	lb.	200000 163000 100000 25000 3000	491000	1
	Catfish.	Ib.	1760	1700	136
JSH.	.əədilinT	Ib.	175000 2000 100000	43000 277000 1700	9692
Kinds of Fish.	Perch.	lb.	350001	1	1505
Kind	Sturgeon.	Ib.	4500	4500	450
	Pike.	lb.	275000 4500 711000 1000000 20000	2006000 4500	70210
	Picekrel.	lb.	650000 761200 448500 75000	1935000	116100
	Trout.	lb.	15000	15200	1064
	Whitefish.	lb.	250000 300000 175000 80000 4000	809000	56630
	Districts.		1 Lake Winnipeg and Red River. 2 Lakes Winnipegosis, Waterhen and Dauphin. 3 Lakes Manitoba, Shoal and St. Martin. 4 Lake Cornorant. 5 Lake Codar.	Totals	Total Values

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#### WINTER SEASON 1908-9.

RETURN of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, the Quantity and Value of all Fishing Materials and other fixtures employed in the Fishing Industry in District of Manitoba and Keewatin, Province of Manitoba, for the Year 1908-9, by Fishery Overseer W. S. Young at Selkirk, Manitoba.

	Districts.		Gill Nets.		
Number.		Number.	Fathoms.	Value.	Number.
4	Lake Winnipeg and Red River  Lakes Winnipegosis, Waterhen and Dauphin.  Lakes Manitoba, St. Martin and Shoal  Lake Cormorant  Lake Cedar.	1,000 834 834 250 67 2,985	\$ 60,000 50,000 50,000 15,000 4,000 179,000	10,000 8,340 8,340 2,500 670 29,850	2 3 4 5

SUMMER SEASON 1908.

Return of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, the Quantities and Value of all Fishing Materials and other Fixtures employed in the Fishing Industry in District of Manitoba and Keewatin, Province of Manitoba, for the Year 1908, by Fishery Overseer W. S. Young at Selkirk, Manitoba.

Q	nd š.			0	0	0
異	Tr.	Value,	<b>€</b> ₽.	10000	300	10300
TRES UR	Piers and Wharfs.	Number.		30	ಣ	65
OTHER FIXTURES USED IN FISHING.	Freezers and Ice Houses.	Value,	<b>09</b>	150000	10000	160000
OTI	Fre al Ice H	Number.		100	<u> </u>	103
		Value.	99	200	:	200
	Seines.	Fathoms.		528	-	528
	m .	Number.		16	:	16
***	lles.	Value.	<b>6/9</b>	34250 16	2000	36250
ŗ	Gill Nets. Rets à mailles.	Fathoms.		500 3425 206500	12000	550 3625 218500 36250 16
ERIA	Ret	Number.		3425	200	3625
Mar		Men.			20	550
Fishing Material.	Boats.	Value.	₩	18000	750	18750
F		Number.		400	50	450
	els.	Men.		100	10	110
	Tugs or Vessels.	Value.	<del>6/9</del>	10 1200 100000	4000	11 1210 104000
	o sgn	Tonnage.		1200	10	1210
	T.	Number.		10	-	1 =
	DISTRICTS.			Red Biver		
		Mumber.		1 Lobe Winnings and Red River	2 Nelson River	

RETURN showing the Kinds and Quantities of Fish in the District of Manitoba and Keewatin, for the Year 1908.

11	Number.	1 2		
	Value.	36,095		306,651
	Caviare.	1b. 10000 2500	12500	12500
	Home consumption.	1b. 250000 100000	350000	6000 105000 10500 12500
	Goldeyes.	300000	300000	105000
	Mixed and coarse fish.	lb.     lb. <td>1600 200000 200000 300000 300000 350000 12500</td> <td>0009</td>	1600 200000 200000 300000 300000 350000 12500	0009
SH.	Catfish.	1b. 200000	200000	16000
KINDS OF FISH.	Tulibee.	200000	200000	2000
KINDS	Perch.	:	]	56
	Sturgeon.	1b. 75000	83000	8300
	Pike,	1b. 200000 1000	201000	7035
	Pickerel,	1b. 1b. 1b. 1000000 200000 1000	1001000 201000	09009
	Whitefish.	1b. 2000000 410000	2410000	168700
	DISTRICTS.	1 Lake Winnipeg and Red River	Totals	Total values
L	Number.	- 67		

## RECAPITULATION

Or the Yield and Value of all kinds of Fish in the Province of Manitoba and Keewatin District, during the Summer and Winter of 1908-9.

KIND OF FISH.	Quantity.	Rate.	Value.
Whitefish Ib. Trout "Pickerel Pike. "Sturgeon "Caviare Perch. "Tullibee "Catfish Mixed and coarse fish Goldeyes. Home consumption "Totals. "Ib.  Decrease.	3,219 000 15,260 2,936,000 2,207,000 87,500 12,800 44,600 477,000 201,700 791,000 633,000 887,000	\$ cts.  7 7 6 3½ 10 1.00 3½ 3½ 2 3½ 3½ 2 3½ 3½ 3½ 3½ 3½ 3½ 3½ 3½ 3½ 3½ 3½ 3½ 3½	\$ 225,330 1,064 176,160 77,245 8,750 12,800 1,561 16,695 16,136 15,820 22,225 26,610 600,396

## RECAPITULATION

Showing the Number of Fishermen, Number and Value of Crafts and Fishing Material in the whole of Manitoba and Keewatin, for the Year 1908-09.

Number.	Description.	Value.
		\$
11 450 6610 16 103 33	Vessels (1,210 tons) Boats Gill-Nets (3,975,000 fathoms) Seines (528 fathoms) Freezers and Ice Houses. Piers and Wharfs	104,000 17,750 56,100 500 160,000 10,300
00		338,60

There were 110 fishermen employed in vessels. 11

freezers and docks. 400 men 11

# APPENDIX No. 9.

# SASKATCHEWAN.

Office of the Inspector of Fisheries, Qu'Appelle, 1909.

To the Superintendent of Fisheries, Ottawa.

SIR,—I have the honour to submit the following report on the fisheries of the province of Saskatchewan for the year ended 31st March, 1909, together with statistical

returns showing the yield of fish, values of catch, plant, &c.

The year has been of a normal character, and the number of men making fishing their business has been nearly the same as in the previous year. The number of anglers who resort to the various lakes for a few days sport is however steadily increasing. A large increase is shown in the catch of whitefish, due to the heavy catch in the Battleford lakes which came to double the amount recorded in any previous season. At Long Lake in the Qu'Appelle district there was also a big increase in the whitefish total. There has been a considerable decrease in the amount of sturgeon taken owing to the buyers formerly operating at Cumberland, having withdrawn from the market and means of transit to a railway shipping point not being provided.

Four hundred and seventy-six licenses were issued, which under the existing regulations prevailing in this province, were all of the same class, "domestic." The character of the fishing carried on by the holders of these licenses varies however to an extreme degree. A homesteader may procure a license to fish and use only a few yards of net in a small lake where his catch will consist of pike and mullet. Probably he will fish for only a few days in the year and the fish taken will be consumed in his own home or

given to his neighbours.

Under a license of the same name and at the same cost, another man may make fishing his chief employment for a large portion of the year, use the full amount, 300 yards of gill-net authorized and dispose of his catch for export.

The number of licenses issued for a particular lake or district affords therefore

very slight guidance as to the extent or value of the fishing there carried on.

It may be said that south of the Saskatchewan river and its north branch, fishing is principally carried on casually by the settlers as a pleasant diversion in the summer time, and more persistently by those of them who live within easy access to the larger lakes as a means of securing a valuable food supply in the winter. In addition to these there are a few who make fishing their chief business, particularly in the winter season, when other employment is slack, and readily dispose of their catch in the local markets

where the demand is generally greater than the supply.

North of the Saskatchewan river the conditions are different. The lakes are far more numerous and vastly larger than in the south and stocked with the finest varieties of fish: but with few exceptions they have not at present any resident population adjacent to them, nor are they easy of acce-s in summer time. The result is that the fishing in them is confined almost wholly to the winter season and is carried on by men who make it their sole business for the winter and move out to the lakes for that purpose. The catch made even in the lakes not too distant from railway points for economic transit, is greatly in excess of local or even provincial requirements at the present time, and consequently the larger portion finds its way to the export market.

From these varying conditions as reported above, it will readily be seen that the single type of license is no longer suitable to the necessities of different parts of the province and the announcement by the minister of his intension to provide for a full revision of the regulations during the current year has given great satisfaction.

The reports from overseers and guardians show that the supply of fish in our waters is being well maintained, though there are lakes which are now being fished to the fullest extent compatible with their maintenance in that condition. Local opinions are often very conflicting as to the condition of a lake in regard to its fish supply. Complaints are received that a lake is being absolutely depleted of fish, and at the same time, others will complain that undue and unnecessary restrictions are being placed on the fishermen as to length of season and extent of net allowed. It is not reasonable to compare the enormous catches made in early days of settlement with the average catch made by the same length of net in the same lake now. The former was very probably made right on the spawning grounds in what is now the close season and the amount of fishing done in the rest of the year would be very limited. Results have now fairly established that a large annual catch of fish can safely be made from waters where the spawning season is properly protected, and the netting allowed regulated as to extent and size of mesh.

The prohibition of the export of fish from this province has been suggested as a means of preventing the exhaustion of our fisheries and also as ensuring a cheaper and more plentiful supply in our own towns and villages. I do not, however, regard this as at all a necessary step at the present time: the one or two lakes which are in danger of being overtaxed can easily be protected by a limitation of season and net. At the larger and more remote lakes which alone offer much opportunity for an export business, special arrangements for transport to railhead are necessary, which cannot profitably be made unless the catch is sufficiently large and regular to warrant the establishment of depots and lines of communication. If the fishermen were restricted to the local markets at present, there would not be enough fishing done to secure such a catch, and as a practical result the local market would be less well supplied than it is now. Two cold storages were constructed at Prince Albert this winter, and between fifty and sixty thousand pounds of fish held over to supply the summer trade. This is the first attempt in this province on so large a scale and the result will be watched with interest.

In the more northern lakes, licenses are only insisted on in the cases of those making a business of catching for sale or barter. The greater part of the catch is consumed by the families and dogs of the half-breed and Indian fishermen. The destructive practice of making a great catch of spawning whitefish to be hung up for a winter supply is stopped as far as possible, though natives are permitted in those remote districts to take sufficient fish in the close seasons for their daily requirements.

From the regular fishermen fairly reliable returns are forthcoming as to the amount of their catch, but from those who fish in a casual way and from the settlers of foreign extraction, the returns are apt to be vague. There is little doubt that even without intention, the amount is often largely understated, and guardians also find great difficulty in arriving at an accurate estimate of the quantity caught by anglers.

Fourteen convictions were obtained for infringements of the fishery regulations and several illegal traps broken up by fishery officers, in addition to several nets seized for being of illegal mesh or set in close season for whom no owners could be found.

In the Qu'Appelle Lakes, whitefish continue to increase though but slowly; those caught are very fine fish in excellent condition running as high as nine pounds in weight. These lakes are abundantly stocked with the coarse varieties but appeals are continuously being made for a supply of black bass to afford better sport to the large number of anglers who visit these lakes.

At Long Lake the demand for licenses was very large in the winter season and the lake was fished from end to end, the catch of whitefish being fifty per cent larger than in the previous year. This district is thickly settled now and licenses were issued to one hundred and thirty-eight residents. If the full amount of net authorized by these licenses had been employed, it would have been in excess of the capacity of the lake,

but as before explained, many fish with very small nets and for only short periods. This lake being within a short distance of Regina and other towns is becoming a favourite spot for summer visitors, and as at Qu'Appelle, there is a great wish for the stocking of its waters with black bass so that better sport can be offered the angler than that afforded by our pickerel and pike. Very little summer fishing is done with nets here at present, though with proper provision of ice, etc., a profitable business should be possible. Ice for that purpose has been put up on a small scale this winter.

There are numbers of smaller lakes scattered through the province well stocked with coarse fish though not carrying whitefish or trout. These waters are highly valued in their respective localities and their total output is quite large. The net licenses given for these are limited to very small lengths and are chiefly utilized for catching mullet.

Turtle and Jackfish Lakes in the Battleford district gave a splendid output of fish this winter, nearly 700,000 lb. of whitefish alone having been caught. I do not consiler that these lakes can safely be fished to that extent every year and have already recommended that the close season be extended here to the same date as in Long Lake. The adjoining country is now well settled and the call on the lakes is likely to be continuous. Over 140 settlers applied for licenses last year and if all are to be granted, a further limitation of the season and nets is certainly necessary.

At Cold Lake the fishing was not so extensive as in the previous winter, but the catches were equally good and the quality of the trout much better. The decrease was due to the buyers of past seasons not returning to the field and the necessary arrangements for handling the catch being late in maturing.

In the Prince Albert district the total catch showed an increase, though only three cars were exported. There was an increased demand for local consumption and as before mentioned some fifty thousand pounds were held over in cold storage, in plants erected by Messrs. Gilmour and Dangerfield. The main catch was again made in the Trout Lakes where no falling off in supply of fish was noted, catches per net averaging larger than last year. Fish were brought in from Stoney Lake this year for the first time and found of good size and quality.

Candle Lake gave very large catches per net in numbers, but the whitefish were small averaging only two pounds. This lake has communication with the Saskatchewan River and sturgeon are reported to have been found there.

It will be noted that the lakes of the Prince Albert district were not fished to anything like the extent warranted by their size. This is not due to their difficulty of access, for fish are freighted longer distances in other districts, but rather to the fact that there being no resident population in their immediate \*vicinity, the men who fish them have to move considerable distances from their permanent homes for the winter, and it is a constantly recurring complaint that the present regulations do not permit of their fishing to the extent possible to men making it their sole business for the season and that consequently they are unable to make a success of the industry. The regulations undoubtedly require amendment to make them suitable to the present conditions of this district in particular, for due advantage of the wealth of fish existing in those lakes fairly accessible from Prince Albert is not now being taken, and such alterations as will enable the industry to be properly organized and profitably pursued will be welcomed.

In the North and South branches of the Saskatchewan, a good deal of fishing is now done in the open water season by the foreign settlers in contiguous districts. Owing to the rapidity of the current, gill-nets can only occasionally be used with success, and the use of small dip nets has been provisionally allowed. By their means the settlers secure good catches of the coarse fish while many sturgeon of small size are obtained in the same waters by hook and line. Some vigilance is required however to prevent the use of such small mesh nets as would take the immature fish, as also to prevent their use in the close season when the run of fish presents the temptation of a big catch.

In the Cumberland district, the withdrawal of the fish company formerly operating there, reduced the fishing done to that required for home consumption, and accounts for a big falling off in the catch of sturgeon. The fur trade being active and other employment plentiful, comparatively little fishing was done.

Good work has been done by the overseers and guardians during the year, and in most districts public opinion is now strongly in favour of the due protection of our lakes and streams. There are doubtless still many minor evasions of the regulations, but no attempt to break them in a large way was reported.

I have the honour to be, Sir,

Your obedient servant

ERNEST W. MILLER,
Inspector of Fisheries.

RETURN of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, the Quantity and Value of all Fishing Materials and others Fixtures employed in the Fishing Industry in the Province of Saskatchewan, for the Year 1908-9.

1		Number.		<u> </u>			
IXTURES FISHING.	and Ice	.enlæV	60-	2500	5500		
OTHER FIXTURES USED IN FISHING.	Freezers and Ice Houses.	Number.			2		
	s-Nets.	Value.	€/-				
	Pounds-Nets.	Number.					
	FISHING MATERIAL.  Gill Nets.  Seines.	Value,	69				
į.		Fathoms.					
G MATERIA		Value.	6/⊕	2960 3800 1700 1200 300	0966		
Fishin		Fathoms		14800 19000 8500 8000 1800	52100		
		Гісепяед теп.		198 173 75 24 6	476		
	Boats.	Boats.	Boats.	Value.	₩	2450 375 720 2500 1000	7045
		Number.		100 18 18 50 50 50	478		
	DISTRICTS.	Number.		1 Qu'Appelle. 2 Battleford. 3 Prince Albert 5 Cumberland.	Totals		

RETURN showing the Kinds and Quantities of Fish in the Province of Saskatchewan, for the Year 1908-9.

	Number.		000000 120470	8	1
	VALUE.	e cts.	24,480 0 60,920 0 31,670 0 31,600 0 4,075 0	152,795	The state of the s
	Mixed and coarse fish,		60000 80000 108000 15000	273000 at 3cts.	8190
	Tullibee, lb.		32000	35000 at 3½cts.	1225
	Eels, lb.				
	Sturgeon, lb.		1000 4000	9000 at 10cts.	006
FISH.	Maskinonge, lb.				
KINDS OF FISH.	Pike, lb.		205000 80000 110000 90000 15000	500,000 at 3½cts.	17500
	Біскегеl, Іb.		122000 2000 38000 10000	197000 at 6cts.	11820
	Bass, 1b.				:
	Trout, lb.		60000 18000 60000 5000	143000 at 6cts.	8580
	Whitefish, lb.		116000 865000 347000 385000	1743000 at 6cts.	104580
	Districts,	Saskatchewan County.	1 Qu'Appelle 2 Battleford 3 Prince Albert 4 Northern 5 Cumberland	Totals.	Value

No distinction made in returns between catches of winter and summer seasons. It is estimated that 90 per cent of the white fish and 50 per cent of coarse fish are caught in the winter season.

E. W. M.

# APPENDIX No. 10

# ALBERTA.

#### SUMMARY OF FISHERY GUARDIAN'S REPORTS FOR 1908.

The following summary of the various guardians' reports,—accompanying their returns,—will convey some idea of the productiveness and value of the fisheries of this province, so far removed from the sea and all that is generally associated with the business of fishing

There are in all eighteen special guardians in the province looking after the fisheries of more than fifty lakes and the contributory rivers. The principal kinds of fish taken from these lakes are whitefish and pike, considerable quantities of trout and

pickerel are also caught.

The fishing permits issued by the Department are what are known as "Domestic Licenses" on which are specified the length of net and size of mesh to be used, and are granted to all British subjects who are bona fide settlers, within a certain radius of the various lakes, on payment of two dollars per annum, entitling them to catch fish chiefly for their own consumption, with a view to the preservation of the fisheries of those waters.

Fish are so abundant in some of the lakes, however, that, even with the limited length of net allowed, much more fish than can be used for the fisherman's own consumption have been taken and sold at good prices in towns within reach, thereby adding considerably to the settler's means of livelihood, besides providing him with

good food.

One of the best lakes in the whole province, namely, Pigeon Lake, is in some danger of becoming fished out; owing to the great number of people fishing, and the inducement offered by its comparative nearness to Edmonton and other remunerative markets. As a consequence of this condition of things the department, with the sole view of arresting the depletion of the lake, has found it necessary to restrict the issuing of fishing permits, to fish on the lake, to those actually living within two and one-half miles of its shores. This has caused considerable grumbling by those living from two and three-quarters to three miles away, and who consider they have as much right to the lake fisheries as their neighbours who live four or five hundred yards nearer, but it must be admitted that the line had to be drawn somewhere, and as the district round the lake is becoming quite thickly settled, the indiscriminate issuing of licenses to all applicants would soon complete the ruin of the lake fisheries. This may appear somewhat like creating a monopoly for those living within the two and a half mile circle, and in course of time, as the settlements grow, it may perhaps be wise, instead of reducing the circle, to reduce the length of netting allowed to each license, to limit the quantity of fish to be taken by each fisherman, and to extend the close season.

Mr. R. A. Mackenzie of Tofield, Alta, whose district lies to the east of Edmonton, and includes Beaver, Hastings, Cooking, Blackfoot and Ministic Lakes, says in the course of his report that there has been an increase in the catch of pike and a greater increase in the catch of coarse fish, as compared with those of previous years. He says that for lack of transportation facilities all the fish caught in his district are used locally, but as the G. T. P. Ry., has been completed through that part of the country he expects that fish will be sent to outside markets in the near future. He also states that of the three thousand three hundred black bass recently deposited in Cooking Lake only two succumbed, and that, after careful examination, he is confident that this

fish will propagate successfully in any of the larger lakes of Alberta.

Mr. F. B. Green of Bonnie Glen, whose district includes Conjuring Lake, which lies to the S. W. of Edmonton, says the fisheries of that lake are in excellent condition.

Mr. W. A. Dunlop of High River, whose district includes the waters of High River, Little Bow River, etc., and lies to the south of Culgary, says that fishing in his district is confined to sport entirely, by hook and line, in the trout streams. Formerly these streams were among the best in Western Canada but are now becoming fished out in spite of all the protection he is able to give.

Mr. James Price of Heather Brae, whose district lies to the east of Wetaskiwin, and includes Dried Meat Lake and Battle River, says that no nets are used in his Fishing is carried on with hook and line, by anglers from miles around and the fish used for their own consumption only. He finds it impossible to estimate the

amount taken.

Mr. W. P. Beaupré of Onaway, whose district lies to the west of Edmonton, and includes Wabamun Lake and Lac Ste. Anne, says that the waters of Lac Ste. Anne are fished chiefly in the fall supplying the settlers in its vicinity with fish for their own use. Fish are large and plentiful with regard to Wabamun Lake he says, owing to railway and other work being plentiful last winter (1908) little attention was paid to fishing, but the few who did fish did well and assert that fish are not decreasing.

Mr. Matthew Cook of Lamerton, whose district lies to the northeast of Red Deer, and includes Buffalo and Chain Lakes, says that a large percentage of the catch in his district is sold in Southern Alberta at remunerative figures, further that winter fishing

has been encouraging both as to quantity and quality.

Mr. K. W. McKenzie of Edmonton, says, in that part of the Saskatchewan River which lies within his district no fishing was done except for domestic purposes and even

that was inconsiderable.

Mr. W. Ouimet of Moose Lake, whose district lies about one hundred miles to the northeast of Edmonton and includes Moose Lake, which is a lake of about thirty miles in circumference, says that pike, pickerel, tullibee and perch are abundant all over the lake, while whitefish are found in the northwest corner of it. Indians and halfbreeds have always carried on a traffic in fish from this lake, and since the formation of a white settlement in the district these latter fish the lake with hook and line for their own use.

Mr. Alex. Hamelin, of Lac La Biche, whose district lies forty or more miles eastward of Athabaska Landing, and includes Lac La Biche, Touchwood, Rocky Island, Mosquito, and Trout Lakes, in the course of his remarks says, that the fall is the time when most fishing is done in his district, but owing to a continuation of strong winds throughout the fall of the year under review, fishing was not so successful as in former years. Winter fishing, i. e., December to February, in the district amounted to nothing owing to excessively cold weather. During the month of March (1909) fishing was carried on, but not many fish were caught. These consisted chiefly of trout, tullibee, whitefish and doré.

Mr. Ingram Wood of Wetaskiwin, whose district lies from forty to eighty miles to the west of Wetaskiwin and includes the waters of Pigeon and Buck Lakes, fears, with regard to Pigeon Lake, that unless summer fishing be prohibited, and the fishing confined to winter alone, the lake will, before long, become entirely depleted as its resources

are now being taxed rather beyond what they can permanently stand.

Following these remarks will be found figures showing the quality, kinds and value of fish taken in the various districts of the province, during the season 1908-09, but it must be borne in mind that owing to the nature of the fishery the figures given are mostly estimated.

Statement of Number of Fishermen, Number and Value of Boats, Nets, etc., and of all Kinds of Fish taken from the Lakes of the Province of Alberta, for the year 1908-09.\*

	Number.		H004700F000		9-10
	Total VALUE.	€			49246
	Mixed fish.		9277 7500 4000 1693 25000	24970	249
	.dl ,əədilluT		3168	3168	126
rish.	Pike, lb.		3000 14100 4200 4225 191450 109100 3000	679075	20372
KINDS OF FISH.	Pickerel, lb.		7750	21750	1087
Kind	Trout, lb.		200000	34854	3485
	Whitefish, lb.		315850 29200 78625 37796	461471	23073
	Maskinongé, lb.		15900	16900	845
To.	Value.	69	360 206 458 180 370 50	1804	:
GILL-NETS, ETC.	Fathoms.		27450 72000 24850	124300	
GIL	Number.	,,,,,,	284 288 111 12 0	263	
	Меп.		178 16 30 20 20 20 20 131	420	ì
BOATS.	Value.	(f)	630 156 360 360 40 450 525	2161	
	Number,		288 288 281 251 251	146	
	Districts.		1 North York, Old Man River. 2 Waterton Mills and Belly River. 3 Figeon, Buck and Battle Lakes. 5 Wabamun Lake 6 Buffalo and Chann Lakes. 6 Buffalo and Chann Lakes. 7 Conjuring Lake 8 Conjuring Lake 9 Lac La Biche, Trout, Mosquito and Egg Lakes. 10 Blackfalds, Snake, Gull and Lacombe Lakes.	Total quantities	Values
	Number.		1 S S S S S S S S S S S S S S S S S S S		

\* Mostly estimated.

# APPENDIX No. 11

# YUKON TERRITORY.

Dawson, 1909.

SIR,-I have the honour to submit herewith my annual report on the fisheries of the Yukon Territory for the year 1908, showing the catch in each district where lieenses are issued as well as those caught by miners for their own use in different parts of the territory.

I did my best to secure all statistics as to the fish caught in different parts of the

Territory as well as value, number of men, boats, nets, etc., used.

The fishinglaws have been well observed in this district during the year and on the whole a fairly successful season for those engaged in the fishing.

I am your obedient servant

H. T. McKAY,

Inspector of Fisheries.

R. N. VENNING, Esq., Superintendent of Fisheries, Ottawa.

9-10 EDWARD VII., A. 1910

RETURN of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, the Quantity and Value of all Fishing Materials and other fixtures employed in the Fishing Industry in the Yukon Territory, for the Year 1908.

			Fishing Material.					OTHER FIXT				
	Districts.		Boats.			Gill-ne	ts.		Freezers and ce houses.		Piers and Wharfs.	
Number.		Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.
1	All Yukon Territory.,	16	\$ ets. 800 00	. 40	142	25,000	\$ ets.	2	\$ ets.	1	\$ cts. 275 00	1

RETURN showing the Kinds and Quantities of Fish in the Yukon Territory, for the Year 1908.

Kinds of Fish.									
Districts.	King Salmon, 1b.	Dog Salmon, 1b.	Whitefish, lb.	Trout, lb.	Pickerel, lb.	Ling cod.	Tullibee, lb.	Greylyng, lb.	Mixed and coarse fish, lb.
Dawson Selkirk Forty Mile Lake La Barge. Lake Tateleman Carcross. Klondyke River Thistle. Yukon River in general	40000 15000 6000 2000 3000 4000 20000	5000 3000 2000 1000	18000 1000 1000 10000 32000 1500 1000	12000 6000 1400		2000 1000 500 2000	7000	4000 500 500 1000	1000 700 1000 200 1000 1000 300
Totals	90000	15000	69500	24400	4000	5500	7000	52000	7200

#### RECAPITULATION

Of the Number of Fishermen, Number and Value of Boats, Nets and Fishing Fixtures, in the whole **Yukon Territory**, for the Year 1908.

Material.	Number.	Value.
Boats Nets tce houses.	16 142 2 1	\$ 800 3,750 1,500 275
Total		\$6,325
Men	40	

#### RECAPITULATION

Of the Kinds and Quantities of Fish taken in the whole Yukon Territory, during the Year 1908.

Kinds of Fish.	Quantity.	Rate.	Value.
		Cts.	\$
Xing Salmon       Lib.         Dog Salmon       "         Whitefish       "         Frout       "         Pickerel       "         Ling Cod       "         Pullibee       "         Greyling       "         Doarse and mixed fish       "	90,000 15,000 69,500 24,400 5,500 7,000 52,000 7,200	15 10 25 40 20 10 25 25 25 10	13,500 1,500 17,373 9,760 800 550 1,750 13,000
Total.,	274,600		58,95

9-10 EDWARD VII., A. 1910

#### RECAPITULATION

Of the Yield and Value of the Fisheries of Manitoba, Saskatchewan, Alberta and Yukon Territory, for the Year 1908.

Kinds of Fish.	MANITOBA.		Saskatci	iewan.	ALBEI	RTA.	Yukon.		
TEMES OF TASIS	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
		s		\$	-	\$		\$	
Salmon Whitefish	3,219,000						105,000 69,500	17,37	
Frout Pickerel Pike	15,200 2,936,000 2,207,000	1,064 $176,160$ $77,245$	143,000 197,000 500,000	8,580 $11,820$ $17,500$	38,650	1,941		80	
Sturgeon	87,500 12,800	8,750 12,800	9,000	900					
Perch Cullibee and Greyling Catfish	44,600 477,000 201,700	1,561 $16,695$ $16,136$	35,000	1,225	3,168	126	,	. , ,	
Hold eyes	635,000 1,678,000	22,225 42,430				249			
Totals	11,513,800	600,396	2,900,000	152,795	1,242,188	49,246	274,600	58,95	

<sup>16,900</sup> lb. Alberta Maskinongé included in above.

# APPENDIX No. 12

# BRITISH COLUMBIA.

REPORT ON THE FISHERIES OF BRITISH COLUMBIA FOR THE YEAR 1908-9, BY INSPECTORS, C. B. SWORD, J. T. WILLIAMS AND E. G. TAYLOR.

#### DISTRICT No. 1.

NEW WESTMINSTER, B. C., 1909.

To the Superintendent, of Fisheries, Ottawa.

SIR.—I have the honour to enclose my report and statistics of District No. 1, British Columbia for the twelve months ending 31st March last.

The difference in value in boats and nets between 1907 and 1908 is simply the natural loss from deterioration; being a poor year many of the boats and nets in stock were not used.

The dry salted salmon, mainly dog, returns are smaller, as this on the Fraser was a hump-back year, hump backs not being so much in favour for dry salting.

Next year being dog salmon year we may expect a much larger quantity to

be dry salted.

The pack of sockeye salmon for the Fraser River was 63,126 cases to which must be added those packed from the traps on the South West Coast, 11,448, while the pack on Puget Sound was 170,951, making a total of Fraser River sockeye packed of 245,-525 cases against 59,815 in Canada and 93,934 on Puget Sound, totalling 152,749 in 1907.

The take of sturgeon though still small compared with earlier years when this fishing was first prosecuted for commercial purposes, has greatly increased over last year.

The oulachon run this year exceeded considerably that of last year.

The oysters given in the statistics are the actual number taken by the Crescent Oyster Co. at Mud Bay from the eastern spat planted by them there.

Your obedient servant,

C. B. SWORD,

Inspector of Fisheries.

#### DISTRICT No. 2.

VANCOUVER, B.C., 1909.

To the Superintendent of Fisheries, Ottawa.

SIR, -I have the honour to enclose my annual statistical report of the fisheries of the Northern Coast of British Columbia, District No. 2, for the fiscal year ending March 31, 1909, including statement of salmon packs of the different canneries.

These returns show an increase in the aggregate, the total value of fish and fish products in 1908 being \$2,735,130 against \$2,385,053 in 1907. This is accounted for by the increase in the salmon pack for 1908.

The total pack of salmon for the season of 1908 is as follows:

Sockeye Cohoe Spring Humpbacks	1908 Cases. 268,605 42,926 20,200 61,470
	393,201
As against 1907.	
Sockeye. Cohoe Spring Humpbacks	Cases. 239,823 39,397 14,460 35,638
	329,318
Approximate detailed decrease and increase:	,
	son 1908.
Skeena River, increase	50,500
River Inlet, decrease.	20,000
Northern Coast, increase	
Naas River, increase	15,000

By reference to the above figures it will be noticed that there is an increase of about 50,000 cases in the Skeena, this is owing to the run being good in all varieties of salmon and not to any increase in the fishing boats, rather a decrease. It is considered one of the best years ever experienced on the Skeena River. There has been a further decrease in the Rivers Inlet pack, this is again owing to unfavourable climatic conditions, the spawning grounds being densely populated with salmon of all kinds. Naas River has had one of the best runs hitherto known and all the canneries filled up. All varieties of salmon were abundant.

The North Coast fisheries were also good, Kimsquit and Bella Coola having especially fine runs of salmon, in fact with the exception of Rivers Inlet, all over my district there has been an abundance of all the varieties of salmon, but especially the humpback, which appeared in countless numbers, completely blocking the small rivers and creeks.

With regard to the Skeena River, I am pleased to report another good pack, all the different species of salmon being well represented, especially the humpback.

The gasoline launch built last season by the department did excellent work in

protecting the fisheries during the weekly close season.

The Oxstahl river is producing more spring salmon and sockeye each year since the removal of the obstruction at the head waters; this is demonstrated by the

number of fishing boats seen operating in these waters.

I regret to say owing to the large number of snags, tree tops and floating debris, dumped into the river by the sub-contractors constructing the G. T. P. Railway during the season, in spite of repeated protests by myself and others, considerable loss both in fish and nets was experienced by the canners and fishermen. I sincerely trust that a remedy will be found for this unnecessary hardship inflicted on the canners.

Regarding the Upper Skeena, I am pleased to report excellent work by our fishery officers, the barricading of streams by the Indians has been entirely abolished

without working any hardship on them.

I inclose Stewart Norrie's report (fishery overseer,) in this connection.

The additional work on the Copper River, a tributary of the Skeena, has been completed, and large quantities of sockeye observed on the spawning grounds at the head waters. Even the weaker salmon being able to ascend. I strongly recommend the prohibition of all fishing for four years on this river, to enable the salmon to repopulate this large area of magnificent spawning ground.

The hatcheries on the Skeena River have been most successful in obtaining a full

Rivers Inlet.—I have to again report a decrease of about 20,000 cases in this season's pack with approximately the same number of boats and nets. The climatic conditions were again unfavourable and it was difficult to catch the fish, as they were running deep, with the water very clear. Fishery Overseer Nordschow reports large quantities of salmon and fishing matters generally very satisfactory on the Inlet, the gasoline launch built by the Department last season being most effective in preventing illegal fishing during the weekly close season. The spawning beds were well seeded and no illegal fishing was attempted by the Indians.

With regard to the Naas River the pack shows a decided increase, especially in the catch of sockeye, which was considered one of the best runs ever experienced in these

waters.

The snag scow did excellent work removing many snags and clearing the drifts, so that the loss of web was considerably curtailed. A contract is let for the removal of certain obstructions on tributaries of the Naas and I hope the work will be completed by August next, in sufficient time for the salmon to reach the large area of spawning ground that will be opened up.

The gasoline launch built by the department last season did excellent work in

protecting the fisheries during the weekly close season.

The North Coast fisheries also show a substantial increase, this is owing in a measure to the Kimsquit Canneries putting up good packs, these fisheries being a total failure last season. Bella Coola also did well both in sockeye and cohoe, the latter being almost a phenomenal run.

I beg to reiterate my remarks on dog-salmon, halibut, oulachon and our deep sea fisheries generally, in my report on last season's work. The conditions then

obtaining are practically the same.

I am, sir,

Your obedient servant,

JOHN T. WILLIAMS,

Inspector of Fisheries.

# FISHERY OVERSEER'S REPORT ON BABINE LAKE, ETC. .

HAZELTON, B. C., 1909.

To J. T. WILLIAMS, Esq., Inspector of Fisheries.

SIR, -I have the honour to report to you, in accordance with instructions from Mr.

Helgesen, regarding the condition of spawning grounds at Babine Lake.

Leaving here on the 18th, I arrived at Babine on the evening of the 19th of August. I travelled in company with Mr. Pretty and the next day we started on the Manson trail for the hatchery, having told Guardian Spinning to meet me at the mouth of Salmon creek, with canoe on Sunday. After walking four miles we came to a fine lake, about the size of Lakelse, crossed that, and again hit the trail for another four miles, when we arrived at the head of the Gordean Lake.

There is a nice creek empties into it here and this is where Mr. Pretty gets his

supply of ova for the hatchery.

We had it fenced, and there was a splendid bunch of sockeyes waiting to go up. They were too bright to spawn and he thought he would let them past and take the next lot, as they would be riper. The lake is about ten miles long and the hatchery is at the lower end.

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It is the finest log building I ever saw, and everything fixed up in good shape.

Salmon creek is about three miles long and I watched the salmon coming up to the lake in a continual stream.

Having met guardian Spinning with canoe he and I started up Babine lake.

There are four families of Indians, on Salmon Arm, and at that time they would average 350 to 400 fish to the family.

The next place was Tatzee Creek. Large number of salmon at mouth getting ready to go up stream, and three families of Indians fishing.

The man we met was taking 600 to his cache at the old fort besides what we had in smoke house.

Babine Lake is simply alive with fish. At every little stream thousands would be playing around the mouth.

At Pierre Creek the salmon are very thick and no Indians.

At 15 mile there is an abundance of fish both outside and up the creek. Four families of Stuart Lake Indians lately arrived are catching fish at the mouth, mostly with spear.

Went two miles up slough endeavouring to reach Beaver creek but had to turn back on account of windfalls.

Next day struck an old trail and after walking eight miles, found Mr. Gibbs and his men spawning fish for the Stuart Lake hatchery, also three families of Stuart Lake Indians.

He is giving them the spawned fish and considers he will have no trouble in filling his hatchery to its full capacity.

At the portage the Indians are getting all the fish they want right out in the lake.

After returning to Babine the next place to visit was the scene of our former troubles, the "barricade."

It is completely deserted. All the houses are stripped and the Indians have built half a dozen new smoke houses at different places along the small lake shore, where the water is slack. At the time I was there, an extra fine run of sockeye seem to have arrived, great fine fish much superior to the fish that had arrived beforehand.

Despite the fact that the Indians' nets are in such poor condition they seem to get plenty of fish. Johnny Williams told me that he had over a thousand himself. They did very little grumbling to me except about the nets. They seem to have come to the conclusion that their nets require care. They have been mended with all kinds of thread, and stuff they could get hold of. They only set them over night, haul them next morning, and dry and mend through the day. I examined most of them, and they are positively rotten.

There has also been a big run of spring salmon here, great fellows over forty pounds, and they make havoc of the nets.

As near as I can gather, they did not use their winter nets very much last season. They seem somewhat averse to talking about them.

With the exception of "Beaver Creek," I believe the rest had been visited by Guardian Spinning once this season before my arrival.

We will also make another tour this month, which will make three times this season.

I remain, sir,

Your obedient servant,

#### FISHERY OVERSEER'S REPORT.

(UPPER SKEENA.)

FORT ESSINGTON, B.C., 1909.

JOHN T. WILLIAMS, Esq., Inspector of Fisheries.

SIR,-I have the honour to submit to you a brief report concerning the spawning grounds in my district, "Upper Skeena."

I must say it has been a most successful season, all the principal grounds being

plentifully supplied with fish.

At Morristown on the Bulkley river the fish were so plentiful in the canyon that the Indians received an abundant supply, without their basket traps this season, fishing from sling boards with their gaff hooks. The Agulgat and Forks Indians were equally successful in their canyon, in the same manner. This style of fishing is much better for the fish, as it does not form an obstruction.

The Kispiax people claim they did not get as good a supply as usual. I think they

missed the main run, whilst they were away having

Guardian Campbell reports considerable fish on. Sclam-Geese grounds, a tributary of the Skeena about one hundred miles above Hazelton, but very few at Blackwater, which is Nasse waters.

The Indians have been very reasonable and have observed the law in every instance.

You have already received my report on the Babine grounds.

I am, sir,

Your obedient servant,

STEWART NORRIE.

## DISTRICT No. 3.

OFFICE OF THE INSPECTOR OF FISHERIES, NANAIMO, B.C., 1909.

To the Superintendent of Fisheries, Ottawa,

SIR, -I have the honour to inclose my annual statistical report of the fisheries for District No. 3, British Columbia, for the fiscal year ending March 31, 1909. These returns show a marked increase in the aggregate, the total value of fish and fish products for the year ending March 31, 1908, being \$1,502,668, against \$1,987,852 for the year ending March 31, 1909, an increase of \$485,184. The greatest development has taken place in the herring fisheries, the quantity of herring taken in the vicinity of Nanaimo alone was 21,833 tons.

The herring find a ready sale in the markets of China. There seems to be an

almost unlimited market in China for dry salted herring.

The salmon traps on the South West Coast of Vancouver Island had a fairly successful season. There was a large increase in the number of spring salmon taken in the traps.

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The spring salmon are mild cured for the German market.

The Victoria Sealing Company despatched nine vessels to the Behring Sea. The catch was less than last year: but owing to the advance in price the results were more

The whaling factory at Pages Lagoon has been closed down; the number of whales found in the Gulf of Georgia did not warrant the company in continuing operations. The whale factories on the west coast of Vancouver Island were operated during the season, and about the same number of whales taken as in the preceding year.

I have the honour to be, sir,

Your obedient servant,

EDWARD G. TAYLOR,

Inspector of Fisheries.

# YIELD AND VALUE OF FISHERIES IN DISTRICT No. 1, BRITISH COLUMBIA, 1908-09.

Kinds of Fish.	Quantity.	Price.	· Value.
Salmon, canned (in cases, of 48 lb.)  " dry salted   lb. " dried (Indian consumption)   " " smoked   " Halibut   Herring, fresh and salted   " " smoked   " " salted   borls   " Trout   Cod   " Trout   Cod   " Shad   " Mixed fish   " Fish oil   galls   Guano   tons   Glue   galls   Oysters   Clams, crabs and other fish not included in above   Clams, crabs and other fish not included in above   Clams, crabs and other fish not included in above   Clams, crabs and other fish not included in above   Clams, crabs and other fish not included in above   Clams, crabs and other fish not included in above   Clams, crabs and other fish not included in above   Clams, crabs and other fish not included in above   Clams, crabs and other fish not included in above   Clams, crabs and other fish not included in above   Clams, crabs and other fish not included in above   Clams, crabs and other fish not included in above   Clams, crabs and clams   Clambar   89,184 2,330,000 900,000 150,000 2,089,750 180,000 8,000 22,500 2,000 200,000 120,000 250,000 8,000 9,780 84 7,000 1,614	\$ cts. 6 50 0 05 0 05 0 10 0 05 0 05 0 05 0 01 0 10 0 05 0 01 0 10 0 05 0 01 0 10 0 05 0 10 0 05 0 10 0 05 0 10 0 05 0 10 0 05 0 10 0 05 0 10 0 05 0 10 0 05 0 10 0 05 0 10 0 05 0 10 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 15 0 05 0 0	\$ cts. 579,696 00 116,500 00 45,000 00 15,000 00 15,000 00 104,487 50 9,000 00 794,577 75 500 00 200 00 11,25 00 200 00 12,000 00 12,000 00 15,000 00 2,151 60 2,352 00 10,500 00 7,263 00 10,000 00 10,000 00	
Total	***		1,742,052 85

# Capital Invested in British Columbia Fisheries, Distrit No. 1, 1908.

Description of Property.	Number.	Value:	Total Value.
Canneries, wharfs, &c Steamers and gasoline boats including chartered Steamers in halibut trade Dories and gear Boats Gill and seine nets (fathoms) Trawls and lines Seows Cold storage plants Oil factories Salteries	300,000	\$ 850,000 390,000 350,000 30,000 156,000 9,000 26,000 135,000 90,000 7,500	\$ 2,268,500
Employees in Fischeries.		Number.	Total.
Salmon fishermen On vessels (including 174 in halibut fisheries) In canneries		2,440 334 1,350	4,124

<sup>\*</sup> Last year entered in error as 35. \*\* One partially dismantled. 22-17

BRITISH COLUMBIA FISHERIES, 1909—DISTRICT No. 2.

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		TARITING!	1	_	67	ಣ	4	20		9.
		Number.	1	3000	250	5500	4500	:		350
Kinds and Quantities of Fish and Fish Products.		Salmon, value.						:		13250
	dI .501,	Salmon, smoked		30000	2500	55000	45000		132500	
D Fise		Salmon, value.		11000	30000	4000	8000	5000		58000
Fish and	b 5c. lb.	Salmon, dry, sal		220000	000009	80000	160000	100000	1160000	
TES OF		Salmon, value.		200	200	840	2000	5500	:	12540
ANTII	. slrd 0	Salmon, salt, \$1		70	20	84	200	550	1254	
s and Qu.	\$6 per	Salmon, value (\$		1255062	450540	281448	372156	:		2359206
KIND		Salmon, cases.		209177	75090	46908	62026	:	393201	:
	vls s.	Value,	60	:	:	:	:	009	009	:
T.S.	Trawls Lines.	Fathoms.		:	:	:	:	18000	18000	:
ATERIA	Gill Nets. Seines.	Value.	€⊕	375	375	:	8000	3900	12650	:
vg M		Fathoms.		220	200	:	3000	1000	1420	
FISHING MATERIALS.		Value.	€9	00066	58226	31246	18252 3000	:	06724	:
		Fathoms.		00400	20000	51920	36200	:	408520 206724 4420	:
		Men.	*	2740[2	1620	069	009	80	5730 4	:
&c.	Boats.	Value.	€€	79940 2740 200400	36900 1620 120000	20222	18300	2120	2032 157482	:
ATS,		Number.		840	286	196	190	20	032	:
s, Bo		Men.		80	47	12	20	18	207	:
Vessels, Boats, &c.	Vessels.	.enlaV	<b>8</b> €	82750	39200	5200	00009	0006	3240 196150	:
	Ve	Gross Tons.		1500	490	200	800	250	3240 1	:
		Number.		[22]]	6	41	20	9	613	
	Discipation			Skeena River	2 Rivers Inlet	River	4 North Coast	5 Q. C. Islands	Totals	Values
		Number.		1 Skeer	2 River	3 Naas River	4 North	5 Q. C.		

\* Including all employees,

SESSIONAL PAPER No. 22

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FISHERIES,
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BRITISE

	Number.	1 2 2 2 4 72	
	Total Value of aul Fish.	\$6,803 50 96,803 50 40,308 00 13,911 00 51,072 50 85,130 00	130 00
	TO VALI	\$ 1,396,803 483,035 340,308 413,911 51,072 5.685,130 50,000	2,735,130
	Canned clams, \$4.50 case.	1700 8160 8160	:
	Fish oil, 35c. gall.	1400 490 600 210 280 280 280 3150 3150 3400 1700 35800 1700 12530 8160	
	Hair seal skins, 25c. lb.	250 300 300 300 75 75 75 75 75 75 75 450	
	Mixed, 5c. lb.	11000 550 6 3000 150 7000 4500 4500 4500 3750	
	Trout, 10c. lb.	7000 1500 1500 1500 1500 700 9000 2500 2500 2500 2500	•
JUIS.	Oulachon, smoked, 10c.	900 5000 5000 6	*
RODI	Oulachon, salt, \$10 brls.		
Fish I	Oulachon, fresh, 5c. lb.	100 9000 400 450 100 45000 100 22500 100 459000 250 22950 above, \$50	total
H AND	Herring, smoked,	4000 9000 400 450 1000 450000 1000 7500 12500 459000 1250 459000 1250 12500 12500	Grand total
Kinds and Quantities of Fish and Fish Products.	Herring, salt and fresh, 1c. lb.	S65         64875         500000         6000         4000         9000         86           195         14625         12000         300         36         400         450         80           195         14625         12000         200         100         45000         36           80000         13280         10         25500         36           80000         13280         156         150           15000         700         750         150           15000         140900         750         58           160         100500         140900         1250         58           150         50250         14090         1250         58           155         1250         1250         22950         58	
Quantiti	Halibut, Sc. 1b.	500000 23000 50000 120000 60000 80000 15000 15000 15000 1600	
S AND	Salmon, value.	64875 114625 179500	
KIND	Salmon, tierces, mild, cured, average 750 lb.		
	Salmon, value.	24064	
	Salmon, frozen, boxes  5c. lb.	481281	
	Salmon, value.	9500 481281 880 880 5000 680 5000 681281 16280 681281	
	Salmon, fresh, 5c. lb.	17600 17600 10000 8000 100000 100000 100000	
	District.	1 Skeena Value. 2 Rivers Inlet. Value. 3 Naas River. Value. 4 North Coast. Value. 5 Q. C. Islands Value. Totals. Value.	

# RECAPITULATION

OF Yield and Value of Fisheries in Northern British Columbia, District No 2, year 1908.

Total value.	1,263,85 <b>6</b>	_
Value.	\$ 670,900 195,150 157,482 206,724 600 24,000 1,263,856	
Number.	411 2.032 408,520 408,520 6 6	5,937
Description of property.	Fisheries— Cameries, wharfs, &c. Vessels Vessels Boats, scows and camp scows. Gill and seine-nets ffathoms) Traws and lines Oil factories. Salteries Total capital.  Employees in canneries—	Fishermen and cannery workers Employed in vessels Total
Value.	2,359,206 12,540 13,250 13,250 16,280 14,090 1,250 1,2	50,000
Price.	\$ 000000000000000000000000000000000000	
Quantity.	393.201 1,160,000 1,160,000 1,160,000 3,25,600 1,005,000 1,005,000 1,403,000 1,403,000 4,500 4,500 1,500 1,500 1,700 1,700	
Kind of fish.	Salmon, canned 48 lb, cases  " salted Barrels " dry, salted Lb, " fresh " mild cure (Tierces average 750 lb,) Halibut frozen Brited " Herring, fresh and salted " " smoked " " Oulachon, fresh " " smoked " " Trout Salted Bris. " Hair seals Saltes Fish oil Cases	Estimate of fish not included in above

BRITISH COLUMBIA—DISTRICT No. 3.

RETURN showing the Number and Value of Vessels and Boats, Nets. &c., also the kinds of Fish caught in British Columbia for the Year 1908.

		Number,		- ]	22	8	4	20	9 (	-1	00	6				
	'q'	Halibut, fresh, l		133,000	127,500	159,000	36,400	25,200	15,400	2,400	92,200	25,400	616,500	30.825		
	•	Salmon fresh, lb		223,400 133,000	195,400 127,500	233,800 159,000	26,200	30,000	6,200	5,400	6,800	10,800	738,000	73.800		
KINDS OF FISH.	.dl	Salmon smoked,		49,800	33,200	20,200	13,100	9,600	2,500	3,000	4,200	10,400	146,000	14.600		
Kinds	.dI ,beslise-yr	Salmon dry-salt		495,000	258,000	1,680,000	1,455,000	41,000	45,800	79,000	35,200	515,000	4,604,000	930 900		
	'səsvo	Salmon canned of		:		23,241	5,615	4,350	33,123	2,000	:	10,589	83,918	545.467		
	Lines.	.value.	<b>∜</b> ⊋	1,500	200	1,500	400	450	550	400	350	1,450		7 100		
	Trap Nets.	Value.	₩	:	:	15,000	:	:	:	:		:		15,000		
HALS	Traj	Number.		:	:	15	:	:	:	:	:	:	15			
Fishing Materials.	Gill Nets. Seines.	Value.	<b>6</b> 9	19,500	1,500	750	4,500	3,000	1,350	3,750	2,250	6,000		49 660		
		Fathoms.		13,000	1,000	200	3,000	2,000	900	2,500	1,500	4,000	28,400			
		Value.	€9	4,640	1,440	1,760	2,240	2,560	1,480	1,000	1,200	840	:	17 160		
		Fathoms.		5,800	1,800	2,200	2,800	3,200	1,850	1,250	1,500	1,050	21,450			
		Men.		455	89	192	86	142	09	20	65	185	1,335			
OATS.	Boats.	Boats.	Boats.	Value.	66	6,840	2,040	2,700	2,100	2,400	2,100	1,320	1,200	2,100		99.800
VESSELS AND BOATS.		Number.		114	34	45	35	40	35	22	20	30	380			
ELS A		Men.		35	9	09	12	10	10	4	10	15	157			
VESS	Vessels.	Value.	<b>69</b>	30,000	4,000	22,800	15,000	15,000	2,000	3,400	3,900	5,400		106 500		
	1	Number.		·	-	. 17	. 23	. 2	2			d 4	. 38			
	6	Uistricts.		1 Nanaimo	2 Cowichan	3 Victoria	Clayoquot	5 Alberni	6 Alert Bay	7 Quathiaska	8 (Yomox	9 West Coast, Mainland	Totals 38	Values		
		Number.		1 Na	2 Co	3 V i	4 Cls	5 A1	6 A1	7 Qu	8 (70	9 W				

RETURN showing the Quantity and Value of Fish, &c., in British Columbia, District No. 3—Concluded.

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1,092,960 00

Grand total.....

	Number.	-	. 67	ಣ	4	70	9	1	00	6			
	TOTAL VALUE OF ALL FISH AND PRODUCTS.	\$ cts.	19,665 00	22,030 00	7,265 00	6,187 50	2,324 50	2,262 50	6,457 50	5,230 00	A STREET, ST. ST. ST. ST. ST. ST. ST. ST. ST. ST.	555,082 00	\$57,500 00 5,000 00 108,988 00 10,890 00
	Crabs, doz.	1,600	200	200	160	150	140	130	340	350	4,070	2,035	\$258,500 2,400 2,600
To an and the second	Oysters, sacks, (125 ib. each).	300	250	200	06	50	- 80	09	140	100	1,570	5,495	6
	Clams, sacks, (125 lb. each).	1,300	1,700	400	1,250	1,000	150	150	2,000	200	8,650	8,850	
	Fish oil, galls.	48,000	12,500	6,400	8,000	7,500	1,000	1,500	3,500	1,500	89,900	31,465	
TIS.	Hair seals, No.	220	400	200	700	550	250	250	0 <u>C</u> F	100	3,420	2,565	&c
FISH AND FISH PRODUTS.	`.dl, dah þəxiM	142,500	65,800	110,000	15,500	11,000	9,000	8,500	10,000	8,800	381,100	19,055	Whale oil
AND FIR	Cod, 1b.	235,000	100,000	14,500	6,000	5,000	3,500	4,500	7,500	4,000	380,000	22,800	Whale oil
	Trout, lb.	2,900	4,000	3,000	2,500	2,200	1,400	009	4,000	3,000	23,600	2,360	Whale oil. Whalt fert. Shrimps ar Abelonies a Estimate o Fur seals.
KINDS OF	Oulachon, fresh and salted, lb.	009	800	1,200	009	300	200	200	200	006	5,800	290	NAME O
	Smelts, ib.		21,000	155,000		:	2,000	1,600	2,500	1,800	183,900	9,195	
	Herring, smoked,	100,000	13,000	9,000	5,800	2,000	1,200	800	4,300	22,000	161,100	16,110	
	Herring, fresh and salted, lb.	43,200,000	8,500	153,500	30,000	31,500	24,200	20,000	29,500	9,000	43,506,200	455,062	
	Districts.	1 Nanaimo	2 Cowichan	3 Victoria.	4 Alberni	5 Clayoquot	6 Alert Bay	7 Quathiaska	8 Comox	9 West Coast, Mainland	Totals	Values	

# RECAPITULATION Of the Yield and Value of the Fisheries of District No. 3, British Columbia.

Kinds of Fish.	Quantity.	Price.	Value.
		\$ cts.	\$
Salmon, canned cases.	83,918	6 50	545,467
dry salted lb.	4,604,000	0 05	230,200
" smoked	146,000	0.10	14,600
" fresh	738,000	0 10	73,800
Halibut, fresh	616,000	0 05	30,825
Herring, fresh and salted	43,506,200	0 01	435,062
" smoked	161,100	0 10	16,110
Smelts	183,900	0 05	9,195
Oulachon, fresh and salted	5,800	0 05	290
Trout	23,600	0 10	2,360
$\operatorname{Cod}$	380,000	0 06	22,800
Mixed fish	381,100	0 05	19,055
Hair sealsskins.	3,420	0.75	2,565
Fish oilgalls.	89,900	0 35	31,465
Clamssacks, 125 lb. each.	8,650	1 00	8,650
Oysters	1,570	3 50	5,495
Crabsdoz.	4,070	0.50	2,035
Product of whaling stations	1,0,0		357,500
Shrimps and prawns			2,400
Abelonies and mussels.			2,600
Estimate of fish not included in above			55,500
Fur sealsskins.	4,954	22 00	108,988
Otter	- 33	330 00	10,890
	00		10,000
Total			1,987,852
			2,001,002

# Statement of the Capital Invested in District No. 3, British Columbia Fisheries, 1908-9.

Description of Property.	Number.	Value.	Totals.
Canneries, wharfs. Vessels Boats Gill and seine nets fathoms Traps nets and traps. Lines Whaling stations. Salteries Scows. Oil factories and barges	38 380 49,850 15 3 22 42 42 2	\$ 109,500 106,500 22,800 59,760 15,000 7,100 247,930 55,000 18,900 8,000	\$
Fur sealing— Vessels. Boats and canoes. Guns and equipments.  Capital total.		348,358 2,946 16,346	367,650 1,018,140
Employees in Fisheries.	0	Number.	Totals.
Fishermen and cannery employees. On vessels Sailors and hunters in fur sealing— White men. Indians.		1,335 157 116 99	1,492 215
- Total			1,707

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d skins.	Brande		
Totals	TOGGES	445 574 574 647 648 904 147 813 450 4,452	502
ч Венк- Сатсн.	Females	232 232 511 233 3339 773 1127 207 1,110	
EASTERN BERRING SEA CATCH.	Males.	40 342 8 35 200 74 222 243 1,167	
CATCH OUTSIDE AREA OF AWARD	Males. Females Males. Females Males. Females	64 123 83 419	
CATCH OUTSIDE AREA OF AWARD	Males.	84 51 168 171 474	
C. Coast Carch.	Females	95	*
B. C. Coast Catch.	Males.	104 38 168 184 121 121 615	oast)
4	Canoes	41 11 12 11 11 11 11 11 11 11 11 11 11 11	g the c
	Boats.	LO 12000	es alon dian ve
WS.	Whites, Indians.	23 24 23 23 23 23 23 23 23 23 23 23 23 23 23	lual Indians in canoes along the Total catch of Canadian vessels
CREWS	Whites.	21 6 Wreck'd 21 21 21 24 7 7	al Indiar
Tons	1	77 4 11 4 10 6 00 6 00 6 00 6 00 6 00 6 00 6 00 6	ndividu
Marters	TARGO GATEO	A. B. Whidden Wm. Heater. T. Lump. John C. Vass. B. M. Balcolm. George Healer A. C. Folger. H. Blacksted Wm. Delouchery	Indians catch (by individual Indians in canoes along the coast)  Total catch of Canadian vessels
.oV	- License	401000000	
Y	equin N	1 Allie J. Alger 2 Dora Seward 3 Ella G. 4 Jessie 5 Libbie 6 Markland 7 Piscawha 8 Thomas T. Bayard. 9 Umbrina.	

# SUMMARY.

1,28	ž č	ο ο ο	4,2	4,9%	
		G	Denting sea	Total.	Sea otter
British C	Indians .	Pobring 6	Suring		Sea otter

Norz.—Although the returns show 36 vessels as belonging to the Fur Sealing Fleet, the Victoria Sealing Company, (the owners) send out only part of the fleet in any one year, hence the reason why only 16 vessels were shown in the sealing report for 1907, and 9 vessels in 1908. The balance of the fleet remained laid up in Victoria Harbour.

SESSIONAL PAPER No. 22

British Columbia Salmon Pack, District No. 1, for the Year 1908.

Canners.	Sockeyes,	Springs.	Chumps & Pinks.	Cohoes.	Total.
B.C. Packers Association	28,664	1,044	15	9,950	39,673
A.B.C. Packing Co	8,296	273			8,569
J.H. Todd & Son	6,239	,		6,565	12,804
Canadian Canning Co	12,102	128			12,230
St. Mungo Cannery Co	5,663			7,672	13,335
Unique Cannery Co	362		400	11	773
Lee Company	1,800				1,800
Grand Total	., .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				89,184

British Columbia Salmon Pack, 1908, (Cases) District No. 2.

											9-10 ED	WAR	D VII., /	A. 191
	District.	Totals.						393 901	393,201					
The state of the s	Cannery.	Totals.	209,177	75,090	46,908	.62,026		393,201	:					
ARY.	Hump- back.	48 lb.	45,404	479	6,612	8,975		61,470	:					
SUMMARY.	Springs	48-Ib.	13,842	454	3,263	2,641		20,200	:	-				
No.	Cohoe.	48-lb.	10,085	9,508	9,449	13,887	-	42,926						
100 A.S	Зоскеуе.	48-lb. cases.	139,846	64,652	27,584	36,523		268,605						
			Skeena	Rivers Inlet	Naas	North Coast	Totals each	,	Grand Total					
*sp	Bistrict, tota								209,177			75,090		46,908
sls.	Cannery, tot		40,019	41,549	13,579	22,803	8,053	4,667	209,177	27,120	7,701 11,035 11,778 8,256 9,200	75,090	15,214 15,915 15,779	46,908
	Humpback.	48-lb, cases.	5,312	14,605	1,884	6,954	5,094	1,121 $2,959$	45,404	237	242	479	3,636 1,394 1,582	6,612
	Spring.	48-lb.	4,012	4,186	352	1,386	663	260 833	13,842	:	241 73 140	454	2,113 650	3,263
	Cohoe,	48-lb.	5,416	971		353		421	10,085	4,903	2,478 86 1,241	9,505	1,924 2,509 5,016	9,449
	госкеуе.	48-lb.	25,279	} 21,787	10,855	14,110	8,053	2,865 13,091	139,846	21,980	7,460 10,238 9,058 8,097 7,819	64,652	9,154 9,899 8,531	27,584
	Location.		Skeena							Bivers Inlet.			Naas	:
	Home of Cannery,	·	Balmoral Cunningham	British American.	Dominion	Oceanic	Skeena River Com Cassiar	Alexandra Carlisle	Total	Brunswick Wadhams	Good Hope Rivers Inlet Beaver Strathcona Kildela	Total	Arrandale Port Nelson. Kintolith Pack. Co	Total

		960 69	20,00
9,146	6,425 9,402 15,247	1	
836	2,522 1,199 218		
:	1,603	12,	
1,623	1,159 1,457 7,394	13,887	
6,687	2,731 6,655 6,032	9,800	
North Coast			
No			
		nlet Total	
Lowe Inlet	Kimsquit Namu Manitou Bella Coola	miths Inlet Tota	

# RECAPITULATION.

# Of the Yield and Value of all British Columbia Fisheries for the Year 1908.

Kinds of Fish.	Quantity.	Value.	Total Value.
		\$	\$
Salmon, canned       48 lbs. cases.         " fresh aud frozen       Lb.         " smoked       "         " salted, dry       "         " (pickled)       Brls.         " mild cured       Lb.	566,303 3,624,631 428,500 8,994,000 1,254 795,000	3,484,369 218,631 42,850 449,700 12,540 79,500	4 507 500
Halibut "Herring, fresh and salted "smoked "	17,512,555 44,965,200 181,600	449,652 18,160	4,287,590 875,652
Oulachons, fresh and salted	613,300 11,900	30,665 1,190	467,812
Smelts         "           Trout         "           Cod         "           Shad         "           Sturgeon         "           Mixed fish         "           Oysters         (128 lb.) Sacks.           Clams         "           " canned         Cases.           Crabs, mussels, etc., (shrimps)         Fish, not mentioned above           Whale, product         Fish oil and glue         Gall.           Fur, seal skins         No.           Hair, seal skins         "           Sea other skins         "			31,855 19,195 16,430 37,800 400 9,000 27,805 12,758 8,650 8,160 7,035 115,500 56,646 108,988 3,015
Fish, guano	84		6,465,038
Increase			6,122,922

# RECAPTULATION

Of the Number and Value of Crafts and Fishing Materials in the whole of British Columbia, for the year 1908.

Description.	Number.	Value.	Total value.
		\$	\$
Fishing vessels and steamers	139 5,012	1,042,6 <sup>-</sup> 0 336,282 30,000	1,408,832
Fathoms of gill-nets and seines Lines, (long and hand) Trap-nets		491,484 16,700 15,000	523,184
Salmon canneries, wharfs, etc. Fish houses (salting). Oil factories (and guano) Cold storage. Fishing scows. Whaling stations.	79 33 7 3 172	1,630,400 86,500 106,000 135,000 44,900 247,930	020,104
Fur Seal Fleet.			2,250,730
Vessels Boats and canoes. Equipment.		348,358 2,946 16,346	367,650
Total			4,550,396

# STATEMENT of Persons Employed in the Fisheries of all British Columbia during 1908.

Men.	Number.	Total.
In fishing vessels boats, canneries, &c	698 10,855	11,553
Seal hunters— Whitemen Indians	116 99	215
Total		11,768

# APPENDIX No. 13.

# FISH BREEDING

R. N. Venning, Esq., Superintendent of Fisheries, Ottawa.

SIR,—I beg to submit my annual report on the Fish Culture Branch for the fiscal year 1908-9. It will be noticed that the number of hatcheries are still being added to year by year, the addition last season being the installation of lobster hatcheries at Georgetown, Prince Edward Island, and several other localities have been visited and reported upon with a view of still further extending this valuable adjunct to nature in perpetuating one of the greatest national assets of this Dominion, viz., the fisheries.

There are now thirty-seven establishments located in the different provinces, as follows:—

Nova Scotia	. 5
New Brunswick	. 5
Prince Edward Island	. 3
Quebec	. 6
Ontario	. 6
Manitoba	. 3
British Columbia	. 9

These hatcheries were in full operation last year and resulted in the distribution of 682½ millions of fry in Canadian waters.

## TOTAL OUTPUT FROM HATCHERIES.

The following table shows the various species of fish, and the total number of each kind, respectively, hatched and successfully planted from the different establishments operated by the department during the fiscal year 1908-9:—

Atlantic salmon (Salmo salar)	12,901,000
British Columbia salmon	87,392,000
Speckled trout (Salvelinus fontinalis)	741,000
Salmon trout (Salvelinus namaycush)	9,381,000
Grey trout (Crustivomer namaycush)	1,105,000
Pickerel or Doré (Stizotedion vitreum)	51,690,000
Lake whitefish (Coregonus clupeiformis)	79,265,000
Lobster (Homarus americanus)	440,000,000

682,545,000

# LOBSTERS.

Of recent years the protection and conservation of this crustacean has occupied a more prominent position in the department and endeavours have been made to add to its increase and value by the establishment of hatcheries and retaining ponds.

Efforts have also been made to establish the lobster in Pacific coast waters and the following reference is made to a shipment of live lobsters which left Halifax in the spring of 1908. The public benefits to be derived from a successful result of such an undertaking was duly impressed on the department by the Honourable Mr. Templeman and others interested in the welfare of the Pacific coast and with this end in view, it was necessary to construct special crates which would afford natural advantages and an even temperature while in transit from the Atlantic to the Pacific. The Inspector of Hatcheries, Mr. Alex. Finlayson and the undersigned, had a model of crate constructed which was submitted to men who had been accustomed to the business of handling live lobsters and it was pronounced by them as being the best arrangementa so far seen for the purpose.

Mr. Finlayson had personal care of a trial pack in Halifax for an equal number of days that it would take to travel from coast to coast, and which was entirely successful.

A Dominion express car containing fifteen crates with 1,620 lobsters, carefully packed in seaweed and in separate compartments, left Halifax on the morning of the 9th of April, and reached Vancouver in due course with comparatively no loss of lobsters. At this point the crates were transferred to the government steamer Kestrel and the journey to Sooke Harbour was immediately begun.

It was subsequently found that owing to shallow water, the steamer could not reach the point where the large crates to receive the lobsters had been placed, which necessitated the unpacking of the crates, and the exposure of the lobsters to the sun, wind and heat from the boilers of the small steamer *Georgia* was responsible for what mortality was experienced. The lobsters, numbering some 1,100 were ultimately placed in the large crates and kept there for some weeks, which proved beyond a doubt that this crustacean would live and thrive in Pacific waters. The distribution was subsequently made in various waters and it is fully expected that the nucleus of an additionl trade to the province of British Columbia has been successfully started.

Mr. Neville, of Halifax, who supplied the lobsters, rendered every assistance and was instrumental in making the Halifax end of the business successful as he took a personal and practical interest in the experiment with the crate and the subsequent loading of the car, which occupied the whole night. Inspector Finlayson and the undersigned accompanied the shipment, and the first-named officer was indefatigable in this enterprise. A trip across the continent in an express car loaded with heavy crates in which one has to live practically for the whole journey, is not equal to travelling in a Pullman car, and there are no inducements for a second trip other than the interests of the service. Owing to the importance to the general public of the preservation of the lobster fishery, I beg to offer the following remarks bearing on this subject:—

In speaking of the Lobster Fisheries of Canada, such a wide field for discussion and criticism is opened that it is a dangerous path to travel, especially as there appears to be no concerted opinion as to the manner of protection or the best method of artificial propagation.

As a food the lobster holds a leading place with the epicure and as a commercial commodity takes first place in the fisheries of the maritime provinces, thus forming an important factor in one of Canada's greatest assets.

For the year 1907 the yield was 8,660,550 pounds preserved, and 97,490 cwt. of fresh or live lobsters, having a commercial value of \$4,084,122. Truly a rich asset and one worthy of the best and most thorough protection that can be devised.

In referring to the propagation of the lobster, it is essential that something be sand on the habits of this crustacean from the time the egg is extended by the female up to the period of maturity.

Copulation occurs usually in the spring and the sperm, which has great vitality,

is retained in a receptacle of the female for a considerable period.

The period between the act of copulation and the ejection of the eggs depends upon natural conditions, but it is well known that the extrusion and impregnation is simultaneous. The eggs are attached to swimmerets by adhesion and are carried by the female lobster for a period of several months if extruded on a falling temperature or in the fall of the year. If extruded on a rising temperature, or in the early spring, the hatching period is much shorter. Thus eggs extruded in the late summer hatch the following spring.

The hatching process will occupy about a week or more, the young receiving no attention from the mother lobster, but lead an independent existence after becoming

detached from her.

An estimate of the quantity of eggs given by various sized lobsters is as follows:— 8 inch lobster, 5,000 eggs.

10 " 10,000 " 12 " 20,000 " 14 " 40,000 "

The size of the egg is 16 of an inch in diameter.

The first year of the lobster's existence may be said to be a series of molting and during which time it attains a length of from two to three inches.

At the end of the second year the length is from five to seven inches, and a ten inch lobster may be rated at about five years old.

Very few lobsters under nine inches in length bear eggs, but an occasional eight inch lobster will be found in this condition.

## ARTIFICIAL PROPAGATION.

The first important point for consideration in the artificial propagation of lobsters is the selection of a suitable site, which offers facilities close to nature for hatching and distributing purposes.

A supply of clean, salt water is essential and should have a salinity of not less

than two and a half ounces of salt to the gallon of water.

A site with a bold shore is preferable as a sufficient depth of water can be secured close to shore, thus avoiding a long and expensive pipe and ensuring a full supply of clean water. The question of fresh water for machinery purposes is also an important factor when selecting a site. The situation of the canning factories must also be considered in this connection as it is from this source the eggs are procured, and the closer they are located to the hatchery, the better for the success and economical management of an establishment of this kind.

#### COLLECTION OF EGGS.

This is the most vital point in fish culture, for if this operation is not performed with the greatest care and the eggs placed in the hatchery jars in good condition, a successful season cannot be expected.

The present system in vogue is a fairly good one and is carried out as follows:—Arrangements are made with the owner or manager of a cannery for the selection of a reliable employee whose duty it is to remove the eggs from the lobsters as brought in by the fishermen. These eggs are then placed on trays packed in a box, frequently sprinkled with salt water and kept in a cool place until called for by the hatchery boat, which is every day, weather permitting.

On reaching the hatchery these eggs are immediately placed in the hatchery jars, through which a supply of water is constantly flowing, which keeps the eggs slightly moving until the young lobster is hatched, when it, of its own accord, rises to the surface of the water and passes into the receiving tanks provided for that purpose.

It must not be thought that the hatching apparatus has reached such a state of perfection that all this detail can go along without constant attention from the em-

ployees of the hatchery.

They are constantly watching each jar to see that a continuous movement is going on, and it is very often necessary that the motion of the eggs should be accelerated by gently stirring with a wing.

#### DISTRIBUTION.

The young lobsters having reached the retaining tanks, it is now necessary to consider their removal to the sea, which is done from ten days to two weeks from the time of hatching, their development depending essentially on the temperature of the water.

Their removal is conducted by placing them in small, deep barrels, which are conveyed in the hatchery boat for a distance of about two miles from shore and deposited as near as possible on the natural hatching grounds. This work is accomplished by either dipping them out or by syphoning through one-inch rubber hose, whilst the boat is moving slowly along.

#### RESULTS.

The question frequently asked in connection with the expenditure of money for the artificial propagation of the lobster is: What results have been derived therefrom?

It is not possible to point to any conclusive proof in this direction, but one thing is certain, that whilst the number of egg-bearing lobsters is becoming scarcer each year, yet the actual number of lobsters captured for commercial purposes has not decreased, but on the other hand has increased; but owing to their small size, have not reached the egg-bearing stage, hence they find their way to the market without an opportunity of once reproducing their species.

Again reports of officers are to the effect that at no time were there so many immature or small lobsters on the grounds as during the past year or two, this especially

refers to localities in which hatcheries have been established.

Again as a fair proof of the success of the hatcheries attention may be called to the numerous applications which are constantly being received for additional establishments, and as such requests emanate from practical fishermen, through their representatives in parliament, it is only fair to assume that the work of the department in the artificial propagation of the lobster has the confidence of those most benefited.

During the season of 1907, five hundred millions of young lobsters were distributed from the five hatcheries in operation on the Atlantic sea-board. Now if only 2 per cent of this number reaches maturity we have a result of ten million mature lobsters, having a value of at least \$1,000,000, the cost of production \$12,500.

# LOBSTER POUNDS.

The question of a further protection of the egg-bearing lobster by instituting retaining pounds is one that has been receiving attention by the department.

In 1903, an arrangement was made with Mr. H. E. Baker, whereby a portion of his lobster pound, located on the southern side of Fourchu Harbour, has been used for the reduction of berried lobsters, such lobsters being liberated in the various areas as the close season commences.

22-18

Mr. Baker is paid 164 cents for each lobster liberated in such areas. The whole

operation being supervised by an outside officer of the department.

The number impounded is limited to forty-five thousand berried lobsters and no other expenses are assumed by the government beyond the 164 cents referred to for each lobster.

The utility of this pound he been specially and most favourably reported upon in the following words by a special inspecting officer.

'The inclosure is teeming with vigorous, newly-hatched-out fry, many are making their way out of the pound through wire netting into the sea.'

Now it is a difficult matter to draw comparisons as to the relative value of pounds and hatcheries.

In pounds a given number of female lobsters, bearing eggs, are retained for a given period, some of the eggs hatching during the retention, the fry finding their way to the sea. The lobsters are all liberated and the hatching process continues at sea.

How many of these eggs actually hatch? A question no one can answer. But we do know that last year some five hundred millions of vigorous live lobsters were

placed in the sea from the hatcheries.

I am in favour of every device that will assist nature in her efforts to increase the lobsters and pounds are no doubt of great value in this direction, but to make them thoroughly effective female lobsters, whether carrying eggs or not, should be retained, as, if the opinion of biennial spawning is a correct one, then it is all the more necessary that my suggestion be favourably considered; otherwise the pound lobsters of this year's retention has no protection next year.

To emphasize this it may be pointed out that the size of the lobster retained last

year in Mr. Baker's pound is given as follows:-

8 per cent under 8 inches.

between 8 and 9 inches.

22 " between 9 and 10 inches.

13 " over 10 inches.

Now as it is the 10-inch and larger lobster that gives the maximum number of eggs it is certainly necessary that the smaller female lobster should be protected until she has had at least one opportunity of producing the maximum number of eggs that nature intended.

In the state of Maine, lobster pounds have received great attention as a comercial enterprise, they being used to retain lobsters until such time as a rising market presents itself.

As far as I can learn there are no government pounds for propagation or retention of female lobsters, the waters being stocked with young lobsters from the hatchery at Gloucester.

The cost of constructing retaining pounds in Canada will average \$3,000. The maintenance of the same I cannot refer to as there is no data in the department covering this.

The cost of building and equipping a hatchery is \$3,500 (not including wharf), and a yearly expenditure of \$2,500 for maintenance.

On some parts of the Atlantic coast the close season commences before the female lobsters have extruded their eggs, which of course prohibits the successful operation of hatcheries; hence these are the areas where pounds would be of value.

In the cannery areas the hatcheries are, in the opinion of the undersigned, of more value to the lobster industry than retaining pounds.

I wish to state most emphatically that pounds wherever established as an aid to the lobster industry should be owned and managed by the department.

One other point presents itself which is considered a vital one in fish culture, viz., the appointment of the officers in charge of these establishments. The service requires the very best and most reliable men that can be found as on them depends the success or failure of the season's operations.

## SPECIAL SHIPMENT OF FISH EGGS.

At the request of the Department of Fisheries, of Dublin, Ireland, a small shipment of ouananiche eggs were sent across the ocean. They were packed in a box specially constructed by the Inspector of Fish Hatcheries and reached their destination in fine condition. The eggs on arrival were handed over to Sir T. H. Grattan Esmonde, Bart., M.P., whose report is as follows:—

Ballynastragh, Gorey, Co. Wexford, August 22, 1908.

DEAR SIR,—I have much pleasure in answering your inquiry as to the ouananiche, and in the following form my answer will probably be of most use to you.

The ova reached me on March 24. They were put down in two hatching boxes on March 25.

The first alevins appeared on April 13, or in eighteen days. The majority appeared on April 18, or in twenty-three days. They were all hatched out on April 26, or in thirty-one days.

The first alevins became fry on May 12, or in forty-three days. The majority became fry on May 16, or in forty-seven days. They were all fry on May 2, or in fifty-two days.

Some 750 were hatched out; but I had a considerable mortality at this stage, when moving them to small fish ponds, which I had specially made. The moving took place from June 1 to June 16; and I moved successfully some 500 fry.

From this date to July 3, I had much trouble with the water-beetle, Notonecta lauca, which killed a number of the little fish. I killed quantities of this beetle; and some of the Dyticus marginalis beetle; but I fancy that I must have lost quite 250 fry by these pests. I cannot say how many fry are now in my ponds; but I daresay I have from 400 to 500. They appear to be doing well; and are from  $2\frac{1}{2}$  to  $3\frac{1}{2}$  inches long, as well as I can judge.

I would be glad to repeat the experiment next year, if you can procure me some more fry; as by then I hope to be in a much better position to deal with them. I need not add that the experiment has been a most interesting one; and if I have not been more successful, I have at least gained experience in dealing with this fine fish.

If I can add anything to this statement in any way, kindly let me know, and believe me,

# Yours very truly, (Sgd.) THOS. H. GRATTAN ESMONDE.

A few thousand salmon trout eggs were also sent to the Brighton Aquarium, England, and reached their destination in good condition; but the department is not in receipt of information as to what success was met with in the process of incubation.

Some 130,000 Atlantic salmon eggs were presented to the New Zealand government, a special employee in fish cultural branch of that colony being sent to Canada to receive the same.

The eggs were conveyed safely to their destination and are reported to have yielded some 117,000 healthy fry, which were distributed successfully.

Numerous applications have been received for the stocking of waters in the provinces of Manitoba, Alberta and Saskatchewan, but as many of the waters covered by such applications are not suitable to the species of fish incubated in the departmental hatcheries, it has not been possible to do much extended stocking in these western waters. It might be mentioned that the cost of transportation of fish from the east to the west is very high, and it is only by chartering a special car that a sufficient quantity of fish can be carried to warrant the expenditure.

Last fall a special shipment of about 5,500 small black bass was made to the west and distributed in suitable waters in the above-named provinces.

This arduous undertaking was successfully accomplished by Inspector of Hatcheries, Mr. Alex. Finlayson and Mr. J. A. Rodd. The fish reached their destination in fine condition and several congratulatory letters have been received by the department commenting on the good work performed by the officers having this work in hand.

It is pleasing to note that with few exceptions, the fishermen are working hand in hand with the department in its efforts to obtain an abundance of fish eggs of the various species required at a nominal cost, and especial reference is made to the collection of over fourteen millions of salmon trout eggs last fall in the Georgian bay, at a cost of less than \$500. More importance is to be attached to this statement than would appear at a first glance, as these eggs were all taken from fish intended for the market, and which, under ordinary circumstances, would have proved a total loss from the standpoint of reproduction.

A further pleasing feature in connection with the pickerel hatchery is the following resolution emanating from Lambton and Huron Fishermen's Association, and which is another proof of the fishermen's faith in the utility of artificial propagation:

'To compel as nearly as possible amongst the members of this association the retention of all spawning fish in the nets for a reasonable time for the purpose of obtaining spawn therefrom for hatchery purposes, and the co-operation of the members of this association toward the accomplishment of the same.'

Some of the following reports from the officers in charge of the respective hatcheries are of unusual interest this year and are well worthy of perusal, and show, in addition to special features of the work, the practical details required to operate a hatchery successfully.

I am very pleased to state that last season was a successful one at the institutions, and the total distribution of fry from each establishment is covered by the following table:—

QUANTITIES of Fry of the different Species Distributed from the Various Hatcheries during the Spring of 1908.

To.	Hatchery.	Species of Fish.	Number distributed.	Total distribution
1	Ottawa, Ont	Salmon trout	996,000	
1.	000awa, 0110	Whitefish	140,000	
		Speckled trout	95,000	
		Pickerel	690,000	
		Atlantic salmon	69,000	
2	Novementle Out	Ouananiche	20,000 $2,600,000$	2,010,00 2,600,00
3		Whitefish	79,000,000	79,000,00
4	Wiarten, Ont	Salmon trout	4,955,000	4,955,00
5	Sarnia, Ont	Pickerel	51,000,000	51,000,00
6	Magog, P.Q	Grey trout	1,105,000	
		Atlantic salmon	100,000	1 910 00
7	Lac Tremblant, P.Q	Speckled trout	5,000 600,000	1,210,00
4	Lac Flourbiant, L.V	Speckled trout	75,000	
		Atlantic salmon	50,000	725,00
8	Tadoussae, P.Q	11 11	3,000,000	3,000,00
9	Gaspé, P.Q	11 11	1,962,000	1,962,00
$0 \\ 1$	Lake Lester, P.Q. ,	Speckled trout	55,000 432,000	55,00
ιI	St. Alexis, F. G	Atlantic salmon.	70,000	
	,	Ouananiche	50,000	
		Salmon trout	40,000	
		Whitefish	125,000	717,00
12	Restigouche, N.B	Atlantic salmon	1,175,000 90,000	1 065 00
13	Miramichi, N.B.	Salmon trout	1,325,000	1,265,00 1,325,00
10	Grand Falls, N.B.	11 11	1,450,000	1,020,00
	Citible I will, Ittalian in the control of the cont	Salmon trout	50,000	1,500,00
15		Lobsters	70,000,000	70,000,00
16	Shemogue, N.B	11	95,000,000	95,000,00
17	Bedford, N.S	Atlantic salmon	290,000 49,000	339,00
18	Windsor, N.S	Atlantic salmon.	850,000	850,00
19	Mangaroo N S	11	1,570,000	1,570,00
20	Bay View, N.S	Lobsters	127,000,000	127,000,00
21	Canso, N.S	4.77	85,000,000	85,000,00
22	Kelly's Pond, P.E.I	Atlantic salmon	900,000	950,00
23	Charlottetown, P.E.I	Lobsters.	63,000,000	63,000,00
ú()	Fraser River, B.C.	British Columbia salmon	10,315,000	
24	1 10001 1011011	Atlantic salmon	90,000	
		Speckled trout	30,000	10,435,00
25	Granite Creek, B.C	British Columbia salmon	6,740,000 4,284,000	6,740,00 4,281,00
26	Skeena River, B.C.	11 11	22,248,000	22,248,00
27 28	Harrison Lake, B.C	11 11	19,600,000	19,600,00
20 29	Rivers Inlet, B.C	11 11	12,300,000	12,300,00
30	Babine, B.C	11 11	4,663,000	4,663,00
31	Stuart Lake, B.C	0	2,442,000	2,442,00
32	Nimpkish, B.C	11 11 11 11 11 11 11 11	4,800,000	4,800,00
				682,545,00

9-10 EDWARD VII., A. 1910

FISH

Statement showing the Places where and the years in which the Dominion Fish Hatannually since the commencement of

r.	YEAR.			ONTARIO.			Qt	JEBEC.
Number		Newcastle.	Sandwich.	Ottawa.	Wiarton.	Sarnia.	Magog.	Tadoussac
		Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.
1	1868-73	1,070,000						2.3.
2	1874	350,000	1					
3	1875	650,000						
	1876	700,000	8,000,000					60,000
5	1877	1,300,000	8,000,000					150,000
	1878	2,605,000	20,000,000					1,180,000
	1879	2,602,700	12,000,000					707,000
	1880	1,923,000	13,500,000					1,250,000
9	1881	3,300,000	16,000,000				900 000	1,155,000
10	1882	4,841,000	44,000,000		********		200,000	334,000
	1883	6,053,000	72,000,000				975,000	660,000
12	1884	8,800,000	37,000,000			,	250,000	995,000
	1885	5,700,000	68,000,000		* * * * * * * * * * * * * * * * * * * *	,	100,000	985,000
	1886	6,451,000	57,000,000	**********		** ********	300,000	720,000
	1887	5,130,000	56,500,000				1,400,000	1,627,000
16	1888	8,076,000	56,000,000				675,000	900,000
17	1889	5,846,500	21,000,000			* * * * * * * * * * * * * * * * * * * *	3,475,000 2,800,000	850,000
18	1890	7,736,000	52,000,000	5,732,000		* * * * * * * * * * * * * * * * * * * *	2,875,000	1,600,000
19	1891	7,807,500	75,000,000	7,043,000			3,050,000	1,700,000
	1892	4,823,000	44,500,000	4,909,000			2,400,000	1,300,000
21	1893	9,835,000	68,000,000	6,208,000	*******			624,000
22	1894	6,000,000	47,000,000	4,480,000			$\begin{bmatrix} 3,600,000 \\ 2,035,000 \end{bmatrix}$	2,060,000
23	1895	6,000,000	73,000,000	3,210,000				1,975,000
24]	1896	5,200,000	61,000,000	3,950,000			3,350,000 3,400,000	2,060,000
	1897	4,200,000	72,000,000	4,100,000			4,500,000	2,500,000
26 1	1898	4,325,000	71,000,000	3,020,000			3,100,000	3,272,000
27 1	L899	4,050,000	73,000,000	3,700,000			3,098,000	2,200,000
$28'_{1}$	1900	5,175,000	90,000,000	3,450,000		* * * * * * * * * * * * * * * * * * * *	3,099,000	2,125,000
29 1	1901	5,900,000	67,000,000	3,410,000			3,135,000	1,400,000
30 1	902	650,000	100,000,000	1,245,000			935,000	2,960,000
31 1	903	2,500,000	90,000,000	1,201,000			885,000	2,730,000
2 1	904	1,475,000	75,000,000	877,000			283,000	1,625,000
3,1	905	1,480,000	106,000,000	1,103,000		* * * * * * * * * *	1,098,000	2,615,000
4 1	906	1,550,000	88,000,000	1,123,000		*,* * * * * * * * * *	875,000	1,550,000
5 1	.907	1,807,000	103,000,000	1,552,000		******	1,210,000	2,435,000
6 1	.908	2,600,000	79,000,000	2,010,000	4,955,000	51,000,000	1,210,000	3,000,000
							1,210,000	3,000,000
	Total	148,511,700	1,923,500,000	62,323,000	4,955,000	51,000,000	54,313,000	54,634,000

# BREEDING.

cheries have been erected; also the number of Fry distributed from each Establishment operations, including the year 1908.

	Quebec-	Continued.		New Brunswick.					
Gaspé.	St. Alexis des Monts.	Mont- Tremblant	Lake Lester.	Resti- gouche.	Miramichi	St. John River.	Lobster Hatchery, Shemogue.	Lobster Hatchery, Shippigan.	
Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	
• • • • • • • • •				100.000	CO COCI				
110,000				100,000	60,000		*****		
50,000				300,000	$150,000 \\ 60,000$				
1,051,000			* * * * * * *	600,000	320,000				
650,000				1,015,000	665,000				
1,597,000				1,470,000	1,025,000	******			
730,000				1,500,000	805,000	170,600			
500,000			,	740,000	770,000	50,000	• • • • • • • •		
530,000				1,400,000	640,000	588,000			
520,000				300,000	925,000	72,600			
859,000				940.000	795,000	811,000			
290,000				660,000	900,000	155,000			
576,000				1,380,000	945,000	2,181,000			
630,000				1,500,000	900,000	2,479,000			
800,000				1,720,000	1,290,000	4,142,000			
450,000				1,280,000	850,000	3,570,000	* * * * * * * * * * *		
806,000				2,396,000	1,022,000	3,492,000			
1,000,000				1,750,000	1,503,000	3,165,000			
965,000				1,240,000	1,310,000	2,378,000			
910,000				883,000	975,000	3,299,000			
850,000				1,080,000	1,010,000	4,096,000			
675,000				2,885,000	1,200,000	4,060,000			
300,000				1,250,000	1,430,000	4,068,000			
1,100,000				2,100,000	1,558,000	4,155,000			
				1,135,000	1,557,000	3,290,000			
				2,025,000	1,605,000	3,980,000			
				1,125,000	1,620,000	3,957,000			
				1,750,000	1,800,000	3,605,000			
734,000				2,310,000	1,700,000	998,000			
830,000				2,052,000	1,000,000	648,000	17,000,000		
1.520,000	125,000			2,525,000	1,500,000	909,000	52,000,000	50,000,000	
1,100,000	298,000	570,000		2,333,000	1,400,000	807,000	100,000,000	100,000,000	
1,100,000	493,000	555,000		1,620,000	1,650,000	1.350,000	122,000,000	70,000,000	
1,175,000	670,000			2,139,000	1,675,000	1,365,000	126,000,000	80,000,000	
1,962,000	717,000		55,000	1,265,000	1,325,000	1,500,000	95,000,000	70,000,000	
					2,020,000	2,000,000		70,000,000	
24,370,000	2,307,000	2,492,000	55,000	49,368,000	37,940,000	65,341,200	512,000,000	370,000,000	

<sup>\*</sup>Lake Lester Rearing Ponds, established in 1904, distribution of Fry nominal, Fish being distributed as Fingerlings and Yearlings.

9-10 EDWARD VII., A. 1910

SCHEDULE showing the Places where and the Years in which the several Fish Hatcheries have been erected, &c. — Continued. FISH-BREEDING.

OLUMBIA.	Harrison Lake.	Fry.	6,505,000 28,773,000 14,724,600 22,248,000	40 020 600
BRITISH COLUMBIA	Fraser River.	Fry.	1,800,000 2,625,000 4,414,000 4,414,000 6,640,000 6,640,000 6,380,000 6,380,000 6,380,000 6,380,000 6,380,000 6,380,000 6,380,000 6,380,000 6,380,000 6,380,000 6,380,000 6,380,000 6,380,000 6,380,000 6,380,000 6,380,000 6,204,000 6,204,000 6,204,000 6,204,000 6,204,000 6,204,000 6,204,000 6,204,000 6,204,000 6,204,000	000 100 17 1
ISLAND.	Lobster Hatchery, Charlottetown.	Fry.	66), 000, 000 100, 000, 000 80, 000, 000 63, 000, 000	000 000 000
P. B. 1	Kelly's Pond.	Fry.	500,000 1,000,000 1,210,000 1,100,000 1,100,000 500,000 0utput of Dunk R. Hatchery, now closed.	000 272 0
	Lobster Hatchery, Canso.	Fry.	8, 000, 000 71, 000, 000 60, 000, 000 85, 000, 000	000 000 166
	Lobster Hatchery, Bay View.	Fry.	7,000,000 (63,500,000 (153,600,000 (164,000,000 (164,000,000 (100,000,000 (100,000,000 (100,000,000 (110,000,000 (112),000,000	2 171 300 000
Nova Scotia	Windsor.	Fry.	575, 000 721, 000 850, 000	9.146 000
	Margaree.	Fry.	**315,000 **559,000 **72,000 **1,179,000 **1,179,000 **1,179,000 **1,150,000 **1,953,000 *	19,113,500
	Bedford.	Fry.	395, 000 1,1000, 000 1,1740, 000 6880, 000 850, 000 850, 000 1,000, 000 1,000, 000 1,000 3,880, 000 3,881, 000 3,881, 000 3,880, 000 3,880, 000 3,881, 000 3,880, 000 3,880, 000 3,880, 000 3,880, 000 3,880, 000 3,880, 000 3,880, 000 3,880, 000 3,880, 000 3,880, 000 3,880, 000 3,880, 000 3,880, 000 3,880, 000 3,890, 000 3,900, 000 3,900, 000 3,900, 000 3,900, 000 3,900, 000 3,900, 000	72,811,000
à P	Y EAR.	1868-73		Total
)er,	quinN		20.40000001121247577802222222222222222222222222222222222	

showing the Places where and the Years in which the several Fish Hatcheries have been erected, &c.—Concluded. FISH-BREEDING.

				BRITI	BRITISH COLUMBIA.	,			MANITOBA	OBA.	Total.
Vumber.	YEAR.	Granite Creek, Sicamous.	L.Lakelse, Skeena River.	Pember-	Rivers Inlet.	Babine Lake.	Stuart Lake.	Nimpkish River.	Selkirk.	Berens River.	
		Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.
1 1868	-73	:	:								510,000
2 1874		:									1,570,000
31.7.									: : : : : : : : : : : : : : : : : : : :		9,655,000
4 1876		:						:	:	:	13,451,000
5 1877						:	:				91,042,000
1010					:			:		: : : : : : : : : : : : : : : : : : : :	91,003,700
2010						:			:	:	99,949,000
00100								: : : : : : : : : : : : : : : : : : : :		:	. 55 . 99 000
201 10	· · · · · · · · · · · · · · · · · · ·					:					83 784 600
11 100				:				* * * * * * * * * * * * * * * * * * * *			53,103,000
11 1000.							:	:		:	81,067,000
15 100				:		: : : : : : : : : : : : : : : : : : : :					76.714.000
14 100			:			:					79,73,000
14 100	0			:					:		88 109 000
101100					:		:			:	47,699,500
10 100				:		:	:				919,000
00107					1						115,779,300
101100	1						:				135,959,000
19 195	T										958 314 000
201 02						:	:	: : : : : : : : : : : : : : : : : : : :			951 919 000
21 12							:		14,000,000	:	904 040 000
200	· · · · · · · · · · · · · · · · · · ·	:					:		19,000,000	:	909 450 500
23 [3					:			:	4,500,000		100,020,000
24 10					:						109 577 000
S1 CZ	ff								9,000,000	:	999 250 000
201 10					:		:		20,000,000		000,000,777
01 17	900				:		:		000,000,50		203,540,000
901106								:	93 000 000		271,301,000
90 00	2	6.760,000						000 000	19,000,000		314 576 500
21 10	50	4,866,500			:			1,030,000	21 500,000		473,258,500
0.00	100	3,074,000						2,430,000	95,500,000		627,541,400
333		4,000,000						4 873 400	20,000,000		657,925,400
37 18	90	. 10,888,000		17,450,000	8,000,000			4 870 000	45.000.000	92,000,000	813,979,350
35 19	35 1907	6,858,000	4,125,750		7,577,000	4 662 000	000 677 6	4 800,000			682,545,000
36 19	08.			19,600,000	12,500,000	4,000,000	000671167				
		2007	00 411 650	47 970 000	000 222 20	4 663 000	9,442,000	21,475,400	236,000,000	92,000,000	6,966,559,350
- }	Tetal	. 45,186,000	-	2006/01/01/15	713011						

All the officers connected with the fish culture have been indefatigable in their endeavours to make the past season a success, and it is satisfactory to note that the desired ends have been achieved.

I have the honour to be, sir,

Your obedient servant.

T. H. CUNNINGHAM.

Superintendent of Fish Culture.

# 1. BEDFORD HATCHERY.

BEDFORD, N.S., March 31, 1909.

F. H. Cunningham, Esq.,

Superintendent of Fish Culture,

Ottawa.

SIR,—I beg to submit my fifteenth annual report of operations at the Bedford hatchery for the fiscal year ending the 31st instant.

The supply of speckled trout and salmon eggs laid down the previous year hatched early in the season with a very small percentage of loss and were planted in splendid condition in waters herein named. The temperature of water in the hatchery at the time of distribution being from 40° to 45° F.

Distribution of fry commenced on May 18 and was completed on June 6, as follows:—

# SALMON.

During the month of October last, I procured about 30,000 speckled trout eggs from the Williams lakes in this county, 40,000 from Phinney's pond, Annapolis county, and on the 19th ultimo, about 30,000 eyed eggs were received from the Ottawa hatchery. About one-half of the latter hatched immediately after being placed in the water here at a temperature of 33° F.

On November 1 last, I obtained at the Little River retaining pond, St, John, N.B., 1,000,000 salmon eggs, which were placed in the troughs at a temperature of 40°, all

of which are looking well.

Salmon and speckled trout eggs take about the same time to arrive at the eyed stage, say 90 days and will hatch from 70 to 80 days after reaching this stage, thus taking about 160 to 170 days from the time the eggs are taken from the parent fish until they are hatched in the troughs.

From 30 to 50 days after the eggs are hatched the food sac is absorbed, and the

fry must receive food.

Much depends upon the temperature of the water. If the season is early and the water gets warm in the river the lesser number of days mentioned are required for their development.

About November 1 when the eggs are laid down in the hatchery the temperature of water is about 40°, as the weather becomes colder the temperature drops to 33° and remains about stationary until about April 1, when it gradually rises to 40° or 45°, when distribution takes place.

During the summer months the water in the hatchery here rises to 70°, which makes it quite impossible to retain fry the whole season, although trout will live at a temperature of 80° if in a rapid running stream when the water is well aerated.

I find it difficult to procure speckled trout in these waters for spawning. The heavy rains at some seasons and the want of moderate rains at other seasons cause the fish to change their spawning grounds.

Artificial ponds are the only sure places to procure eggs, and can be relied upon

when fed by spring water.

During the past year salmon fishing was reported good in all the rivers stocked from this hatchery.

I am, sir,

Your obedient servant,

ALFRED OGDEN.

## 2. MARGAREE HATCHERY.

N. E. MARGAREE, N.S., March 31, 1909.

F. H. Cunningham, Esq., Superintendent of Fish Culture, Ottawa.

Sir,—I beg leave to submit for your consideration my annual report of operations prosecuted at the Margaree hatchery for the year just ended, March 31, 1909.

On April 1, 1908, the ova were all hatched, the resultant fry appearing very vigorous and healthy, and continuing in that condition until distributed. The temperature of the water at this period was about 42° F., rising to 45° F. about end of period. During the month of May the fry were liberated successfully in the following streams, myself or assistant, Mr. L. J. Burton, always accompanying each allotment:—

#### DISTRIBUTION OF SALMON FRY.

Stewart's brook, Marga	roo mirron	Invormoss coun	t	80,000	
	ree river,	inverness coun			
Big Intervale				160,000	
Black Rock	66	"		75,000	
Tingley's	66	66		100,000	
Greig's,	66	66		75,000	
Hatchery river,	66	66		.50,000	
Crowdis bridge,	66	ee .		100,000	
N.E. Margaree river, I	nverness	county		80,000	
Cranton bridge, Margan				100,000	
Plaster	"			100,000	
Big brook,	66			100,000	
Gallant brook,	66	66		35,000	
Rossville river,	46	66		100,000	
Harvard lakes,	66	66		50,000	
Southwest Margaree ri	iver	44		75,000	
Little river, Cheticamp		66		120,000	
Strathlorne river,		"		50,000	
Beaver brook, Middle ri	iver, Victo	oria, county		60,000	
Baddeck river, Victor	ia county			60,000	
			_		
Total				570.000	

After distribution, the trays, distributing cans, supply tank and troughs were thoroughly varnished, bringing everything in readiness for the autumn operations.

On November 7, I arrived at the hatchery from Little river retaining pond, St. John, N.B., with the ova for the year's operation, viz.: eleven boxes containing 2,240,000. They were at once placed in the incubation troughs, appearing to be in first-class condition, with the exception of a few trays. The temperature of the water at this period stood at about 39° F. The eggs were in the eyed stage of development about January 15, being seventy days from the time placed in the troughs. Hatching commenced about March 28 in several trays, but is proceeding very slowly. From the eyed stage to first hatching, seventy-two days. Temperature of water during this period averaged 40° F. The result of hatching should yield 80 per cent of fry, perhaps more. Owing to the temperature of water all through the season being lower, hatching will not be completed until a few weeks later than last year.

I have the honour to be, sir,

Your obedient servant,

A. G. CARMICHAEL.

## 3. WINDSOR HATCHERY.

WINDSOR, N.S., March 31, 1909.

F. H. Cunningham, Esq., Superintendent of Fish Culture, Ottawa.

SR,—I beg to submit herewith my third annual report. The ova were all hatched April 22, 1908, the temperature of the water then about 40°. Distribution began May 22. Out of the 1,000,000 ova laid down, 850,000 healthy fry were released in the following waters:—

Avon river, Hants county	250,000
Meander river, Hants county	250,000
Kennetcook river, Hants county	50,000
Hebert river, Hants county	50,000
Shay lake, Hants county	5,000
Cornwallis river, Kings county	50,000
Gaspereaux river, Kings county	35,000
Round Hill lake, Annapolis county	20,000
Grand lake, Annapolis county	20,000
Dargie's lake, Annapolis county	10,000
Milford waters, Annapolis county	50,000
Sissiboo river, Digby county	50,000
Bear river, east and west branch, Digby county	85,000
Tusket river, Yarmouth county	50,000

On November 2, 1908, I went to Miramichi retaining pond and on the 6th returned with 1,040,000 salmon ova. The same being laid down in good condition. These ova were quite well eyed out March 15, 1909, the temperature of the water then being 34°.

I am inclosing herewith letter of E. B. Eaton, Esq., relative to salmon fishing in

Kings county.

All the rivers in Hants and Kings county empty into the one body of water, the Minas basin, and that previous to the establishing of a hatchery here the Bedford hatchery had been supplying the Gaspereaux and Cornwallis rivers with salmon fry.

In the Avon river, more salmon were caught last season than any previous year.

The shad fisherman often catching more salmon than shad.

Salmon are spawning naturally in the Avon river, quite a large number of spent females being caught at the head of the river last month.

I have the honour to be, sir

Your obedient servant,

FRANK BURGESS

Canning, March 22, 1909.

DEAR SIR,—Your letter received and in reply would say that the total catch of salmon in Kings county for the season of 1907, was 303,550 pounds, which was a phenomenal catch. The season of 1908 shows a falling off, total catch for said season 81,700 pounds to be accounted for in part by the scarcity of herring and alewives which they follow up our bays and rivers for food. Then again the influx of salmon is subject to climatic influences and prevailing winds and storms. It is well known the effect of winds upon the course taken by salmon while passing along our shores. But there is no doubt of the increase of the average yearly catch of salmon in Kings county.

I am a great believer in the artificial propagation of the fishes, and if it was not for the fry received from the Bedford and Windsor hatcheries, salmon would be (in Kings county) like the shad, about extinct. I know that the fry that we have been putting in the Gaspereau river have grown and increased, so that last summer I observed thousands of smelt mooring down stream. I have also received reports from anglers

to the same effect.

Yours truly,

E. B. EATON, F.O.

To Frank Burgess, Esq., Windsor.

# 4. BAY VIEW HATCHERY, N.S.

PICTOU, N.S.

F. H. Cunningham, Esq.,
Superintendent of Fish Culture,
Ottawa,

DEAR SIR.—I beg leave to submit my annual report of operations at the Bay View hatchery for the season of 1908.

I commenced to get this hatchery in readiness for the season's operations on April 20. There being very little ice in the strait this spring the fishermen were able to set their traps as soon as the season opened, but as the weather was very cold and stormy there was not much fishing done till the first week of May.

I started the pump on May 9, with 14 jars of eggs, and collected from 6 canneries

up to June 25.

Berried female lobsters were very scarce, and I only succeeded in filling 275 jars

this season. The capacity of this hatchery is 316 jars.

All of the eggs were in very good condition, as they were brought to the hatchery the same day they were removed from the lobsters, and hatched out very successfully. The first fry appeared in the tanks on June 20, about ten days earlier than last year, and the last were distributed on July 7. One hundred and twenty-seven million young fry were distributed around Pictou island, Gull rock and the bay outside of Pictou and Cariboo harbours.

The catch of lobsters was exceptionally good in this vicinity; in fact the best for several years.

During the winter a gasoline launch was built for the hatchery service and proved a success, making a round trip to the canneries, collecting ova every day during the entire season, giving us a first-class service at much less cost than a steam tug could do the work. Since putting out the last of the fry, I have cleaned and painted the hull inside and out. The engine installed by Fraser Bros. gave very good satisfaction this season.

The supply pipes from the salt water tank will have to be replaced next season, also a section of the 6-inch suction pipe. The boiler and pump are in good repair after eighteen years' service.

The hatchery was closed on July 11, after thoroughly cleaning and storing every-

thing.

I have the honour to be, sir,
Your obedient servant,

W. F. HARRIS.

# 5. CANSO LOBSTER HATCHERY, N.S.

Canso, N.S.

F. H. Cunningham, Esq., Superintendent of Fish Culture, Ottawa.

Sir,—I have the honour to submit the annual report of operations at this hatchery for the season of 1908, and beg to say that on April 25 we began to get the hatchery ready for work.

I had the steamer collecting eggs during May and June, and we filled two hundred jars.

We have had a very fine season, no easterly storms, and the result from the hatchery was most satisfactory. Eighty-five millions of healthy young lobsters were hatched, and we distributed them in the vicinity of the factories from which we collected the eggs.

In June we had a visit from Mr. Finlayson, Inspector of Hatcheries, and he expressed himself well pleased with the general condition.

On August 1 we distributed the last fry, and after the necessary cleaning and painting we closed down, leaving everything in good order.

I have the honour to be, sir,

Your obedient servant,

JAMES MEAGHER,
Officer-in-Charge.

# 6. FOURCHU LOBSTER POND.

Louisburg, C.B.

F. H. CUNNINGHAM, Esq.,
Superintendent of Fish Culture,
Ottawa.

Sir,—I beg to submit my report as fishery officer supervising the H. E. Baker Lobster Pond, at Fourchu, N.S., during the lobster season of 1908.

1. The first seed lobsters were deposited in the pond on May 14.

2. The food used this season was the same as other seasons: herring slightly salted, which were cut in small pieces and distributed in the pond two and three times per week. During the latter part of July very little food was distributed, as the lobsters did not appear to be as voracious as earlier in the season.

3. No sickly, dead, or soft-shelled lobsters were placed in the pond, all week lobsters were released, either from the smacks at the factories, or before being placed in the pond. I only saw one soft-shelled lobster this season, and it was not a seed one.

4. The average size of seed lobsters placed in the pond were as follows, viz.: Nine per cent 8 inches, 56 per cent between 8 and 9 inches, 22 per cent between 9 and 10 inches, and 13 per cent over 10 inches.

5. The condition of the eggs on the lobsters when deposited in the ocean was as follows, viz.: Forty-five per cent had green or dark (newly extruded) eggs, 25 per cent were pale, 20 per cent were light coloured, advanced, and 12 per cent of the eggs were hatched, the fry having developed in the pond.

6. The death rate during the season was the lowest during the operation of the pond, being less than 1 per cent during May,  $1\frac{1}{2}$  per cent during June, and  $2\frac{1}{2}$  per

cent during July.

7. The lobsters, totalling up to 49,525, were in excellent condition during the whole season. The young fry made their first appearance on July 22, but not in as great a number as in former seasons.

The lobster fishermen on the southeast coast of Cape Breton have had an exceptionally good season. Many of the fishermen give the Baker pond credit for a portion of the increased supply, while others are not so favourably disposed towards it. It is a fact that the factories at Louisburg, Gabarous and Fourchu, packed 40 per cent

more lobsters during 1908 than they packed in 1907, and this average would have been increased another 10 per cent at least if a sufficient supply of bait could have been procured during the month of July.

I have the honour to be, sir, Your obedient servant,

H. C. V. LEVATTE,
Officer Supervising Baker's Pond.

# 7. RESTIGOUCHE HATCHERY.

FLATLANDS, near CAMPBELLTON, N.B.

F. H. Cunningham, Esq., Superintendent of Fish Culture, Ottawa.

Sm,—I beg to submit herewith my annual report upon the operations of the Restigouche hatchery as conducted under my charge for the current fiscal year from April 1, 1903, to March 31, 1909.

The work of towing, distributing and liberating the fry began on June 17, and

the fry were planted in the various streams and waters as follows:-

Restigouche river, towed by scow	375,000 300,000
Matapedia river and lake, by cans	
Jacquet river, by cans	75,000
Pond and tanks at hatchery held over summer and fed	25,000
Total	1,175,000

#### SALMON TROUT.

One hundred thousand salmon trout eggs were deposited in the hatchery by Mr. Finlayson, Inspector of Fish Culture; these eggs were successfully hatched, only about 10 per cent being lost.

The fry were deposited in the following lakes:-

Lake Neigetts, R	imouski co	unty	 		30,000
Lake Matapedia.			 		50,000
Black lake, Restig	gouche cou	nty	 		4,000
Little lake,	66		 		2,000
14 Mile lake	•		 		4,000
				-	
Total	0/ 0 0 0 0 0 0		 		90,000

The fry held over summer in the pond and tanks were distributed and planted in the autumn in the Matapedia river. These little fish when liberated are approaching the fingerling stage, about two inches in length, and unlike the young fry, they do not immediately seek shelter, but rather play around in search for food unless disturbed by some predaceous enemy, when they are seen to dart in all directions taking shelter under large boulders or in grass and mossy growth, if such shelter is afforded.

#### FEEDING FRY OVER SUMMER.

A great deal of extra and careful work is entailed in the method of rearing and feeding young salmon fry through the summer months. They must have an abundant supply of pure water, containing lots of oxygen, and the temperature must not exceed 55 or 60 degrees Fahr. The fry for the first few weeks must be fed several times a day or every two hours on fine pulverized liver, blood and smelt, or other fish eggs make excellent food when it is possible to procure it. The tanks and pond must be kept perfectly clean by the removal each day of all dead and decayed matter. The fry should be well protected from the hot rays of the sun, having a constant current of water passing over them to keep them on the move.

I am inclined to the opinion that only a limited amount of work can be carried on along these lines, as there are so many difficult problems to overcome in an attempt to retain any large number of salmon fry and artificially feed them for any great

period of time.

# MINIATURE RETAINING POND.

These retaining ponds I consider the better method, to adopt wherever possible, located as far up or near the head waters of the rivers as practicable, and the eggs conveyed to these ponds or tanks about the first of May or just previous to the fry bursting the shell, and there hatched and cared for for about six weeks until the yoke sack has become absorbed, when the fry can be planted in perfect condition in select sheltered places up and down the river. This would guarantee the greatest amount of protection to the life of the fry for a period of time after planting.

# INTERNATIONAL RAILWAY.

This new road, traversing the country as it does from Campbellton to the St. John river, and in a parallel line with the Restigouche river for about 80 miles, offers great facilities for the transportation and distribution of fry, and the adoption of miniature hatcheries, both on the Upsalquitch river and at the junction of the Kedgwick, would obviate the towing of fry by scow, and guarantee the planting and distribution many miles higher up the river, and always in a perfectly healthy condition.

#### LARGE BROOKS.

These large brooks are tributaries, so to speak, of the main Restigouche river, extending in some instances 20 miles into the interior of a wilderness country, and as the International Railway offers such facilities for carrying fry to the head waters, I would recommend the planting of some fry in these streams. Of late years I have noticed numbers of parr two years old well up some of these brooks. This fact is the best evidence of their suitability for the planting of fry. The water has a temperature of from 45 to 50 degrees Fahr. through the summer months, so evidently it is this cold pure water, combined with the rich natural food, which entices the fry and fingerling fish to naturally work their way up these streams from the river.

#### TIME OF INCUBATION.

The eggs are generally laid down in the breeding troughs first week in November. The average temperature of the water in the hatchery for November is 37 degrees Fahr. After December 1 and until April 1 the temperature of the water stands about 32½ degrees. It occupies about 120 days from the laying down of the eggs in the hatchery troughs in November until they reach the eyed stage, when on pressure of 22—19

the egg at this time the little jelly-like substance inside is seen to wriggle, which is the first signs of life to an untrained eye, notwithstanding the various organs which are undergoing development and can be seen by the practical eye to change almost from day to day from the time the eggs are deposited in the hatchery until the tiny fish burst the shell.

From the period of the eyed stage (March 1 until June 15) 90 or 100 days clapse before the fry in Restigouche hatchery begin to burst the shell, and sometimes all hatch in a week. The young alevin, now resembling a pea-shaped, jelly-like object or polliwog with his yoke, sack or bag of food attached to him, swims around in the hatchery trays for four to six weeks, by which time his supply of food, which nature was so kind to supply, has become exhausted, and this strange looking little creature when it first burst the shell, has now developed into a perfect little fish with a V-shaped mouth, and must have food, either natural or artificial; so it has been decreed by pisciculturists the world over that the best results are obtained by liberating the fry at an age from four to six weeks old when the yoke sack is about absorbed. I might state that so far as my close study of thirty years' experience teaches me, I consider it the best time to liberate salmon fry.

# PLANTING OF YOUNG FRY.

They should always be planted as far up the rivers as possible, because the young fry and fingerling fish, spend the first two years of their life in fresh water, at least that is true of all salmon rivers bordering on the Atlantic ocean. This being the case, it shows the importance of planting the fry well up towards the heads of the rivers so they may have 80 to 100 miles of river to roam and feed in before reaching the estuary or sea. Fry planted only a short distance above tidal waters may find themselves in the estuary of the river a year or so before they naturally ought to reach that point, only to be eaten up by many varieties of predaceous fishes which always lurk around and inhabit the estuary and mouths of all rivers.

#### FRY WHEN FIRST PLANTED.

When first planted they immediately seek shelter under the large shelving stones or other protection afforded. They remain hidden for almost a year, seizing upon small particles of crustacea and other food as it is swept along to them by the current. Fry should always be planted in a fairly good current not too far from shore. Their food will be carried to them by the action of the current and they are more liable to escape the larger fish which usually inhabit the deep, still waters and pools. After the young fry are a year old they become more active, searching around and living on all kinds of food; insects, flies and crustacea. They are now beginning to gradualiy drop down towards the sea. When they arrive at the parr stage they are two years old, a perfect little fish; five to six inches in length, bearing the brilliant red spots and dark square bars or transverse bands up and down the sides, showing the true life line of the salmon, and cannot be mistaken for any other fish. At this stage they are rapidly migrating out to sea, and grow fast and soon become transformed into a smolt about the size of a small herring. These have been caught in the bay outside the mouths of the rivers in September and October. By the following spring the smolt has developed into a grilse, weighing from 3 to 5 pounds. Only the male grilse ascend the rivers at three years old—the female remains two years in the ocean. does not ascend the rivers until four years old. A salmon weighing from 8 to 12 pounds the first year in from the ocean reproduces her species.

#### CAPTURE OF PARENT FISH.

The reconstruction of the retaining pond at Tide Head was begun about May 15 last. It usually occupies about ten days to set the pond in order, after which time the departmental trap is immediately set, also the McBeath licensed net, which is used as a shear net to guide the fish into the government trap net. The two licensed nets, McBeath's and D. Sheals', have been worked by the department as an aid to the government net for some years. When these two nets are set for commercial purposes they obstruct the channel leading to the government net, but when worked as an aid to the government net they increase the catch 50 per cent.

Immediately after the pond and nets were placed in proper operation and good catches of stock fish were being made a sudden rise of two feet in the river brought down all sorts of debris and drift logs under the shear booms and swept away the greater portion of the government nets, so that only a few days' fishing of the net

occurred in June.

The damage was repaired as quickly as the freshet would admit and the net reset, capturing some 355 very fine stock fish in about twenty days' actual fishing during June and July, when the net was removed, a month before the end of the fishing season.

Spawning operations of the fish and the collection of the eggs began about the 20th of October and extended for a period of time into November. Some 2,055,500 beautiful eggs were collected and safely deposited in the hatchery troughs about the 10th of November. These were supplemented by a further small supply of 100,000 which I brought with me from Little River, St. John, N.B., making a total of 2,155,500 eggs laid down in Restigouche hatchery last autumn. These eggs have been properly cared for during the winter and are now in excellent condition, from which a large healthy crop of fry must eventually be hatched and distributed.

#### GENERAL REMARKS.

The salmon fisheries of Baie des Chaleur and Restigouche river has fully maintained its standard catch during the last twelve years, in fact it shows a great improvement over any other period previous to 1896. Last year's catch (1908) was above the average. The fish came early and continued to ascend the rivers in large numbers all the season through, and were very large and much fatter than usual.

It is now generally acknowledged by fishermen, fish buyers, anglers and others that the Bay of Fundy salmon are now being caught in the Restigouche river. Last year it did not require an expert to select a new species of most beautiful salmon from the native Restigouche fish. The new species has very short, well-shaped head, very deep at the shoulder and fatter than the Restigouche salmon, and not so long according to same weight. This is characteristic of the Bay of Fundy fish, and no doubt is the result of planting the fry of the Bay of Fundy fish and St. John salmon in the Restigouche and Upsalquitch rivers for a number of years past.

Good reports come from all points where fry has been planted. J. A. Pratt, of Rivière du Loup, reports that both the young salmon and salmon trout six inches in length have been caught in the small lakes where fry were planted a few years ago in

that vicinity.

Also good reports come from rivers and other points where salmon fry have been planted. Also the Restigouche and Upsalquitch have been simply teeming with young fish and parr for the last few years. Matapedia river was better last year than for many years. It is fast approaching its old condition, one of the most celebrated salmon rivers.

I attribute a good deal of this grand condition of affairs to the energetic efforts of the anglers in guarding the rivers so systematically as they are doing. With a little

 $22 - 19\frac{1}{2}$ 

better enforcement of the close season in the estuary and bay, combined with the good work of the hatchery, there need be no fear for the further reputation of the far-famed Restigouche and its tributaries.

All of the above is most respectfully submitted.

I have the honour to be, sir,
Your obedient servant,

ALEXANDER MOWAT,

Fishery Officer.

# 8. MIRAMICHI HATCHERY.

SOUTH ESK, N.B.

F. H. Cunningham, Esq., Superintendent of Fish Culture, Ottawa.

Sir,—I beg to submit the following report on the operations at this hatchery, for the year ending March 31, 1909.

It is satisfactory to state that the work has been highly successful during the year, and that the increased capacity of the new hatchery gives an opportunity of breeding a much larger number of fry, than under former conditions.

The number of ova in the hatchery on April 1, 1908, was only 1,400,000, as previous to that date 2,360,000 had been transferred from here and divided between the Windsor, Gaspé, Charlottetown and Ottawa hatcheries. The ova commenced hatching on May 15 and were all out on May 23, producing 1,325,000.

The distribution of this fry was completed on June 30. They were deposited on the best available planting grounds, as shown by the following statement, viz.:—

On small rivers, tributary to the main northwest Miramichi. Head waters of northwest Miramichi Little southwest Miramichi and tributaries	325,000
Total 1	

After the distribution was completed, the work of getting everything in readiness for the reception of the supply of parent salmon was undertaken. As the matter of improving and enlarging the pond for retaining the parent fish here was under consideration for some time, it may be worthy of mention that this work was very successfully carried out. It is well known that in order to produce healthy ova, and vigorous fry, the parent fish must be in the very best condition at spawning time. In order to obtain these results the pond hitherto used was abandoned. As it was becoming filled up with sediment and refuse, and as it was supplied by only a comparatively small stream, the conditions did not warrant the belief that it would safely carry over 400 fish in good condition.

As the number of fish required this season was about four times that number, a new site was selected a short distance from the hatchery, where in addition to a generous supply of fresh water, arrangements were made whereby the tidal water would enter the pond at every tide, giving a depth of from 7 to 10 feet. The bottom is clean and gravelly, and sufficient space was inclosed to contain from 1,600 to 1,800 fish without crowding. Immediately after the completion of the pond on September 12, the work of procuring the parent salmon and placing them therein was commenced.

The nets were kept in operation for twenty-one days, and during that time 1,566 parent fish were netted and inclosed in splendid condition. It was estimated that over two thousand grilse were also taken from the nets and liberated. It will show that the site for retaining this large number of fish was judiciously chosen, as during the time they were in the pond not one fish showed any signs of fungoid disease, and they were in excellent condition at spawning time.

During the period that the fish were inclosed, the pond was visited by the residents of the locality, and by many other persons, who all expressed themselves in appreciative terms of the splendid sight afforded by such a large number of healthy salmon, and also for the efforts that the government is making in this locality towards

aiding and benefiting the fisheries.

Stripping operations commenced on October 23, and continued until November 16. As previously stated the total number of fish placed in the pond was 1,566. This number consisted of 860 females and 706 males. During the first week only a small percentage of the fish were found to be ripe. When the last were seined from the pond on November 15 there were still thirty-five unripe, and, as the pond was freezing over, these were liberated. It was also found that fifteen had spawned in the pond, leaving a balance of 810 fish from which ova was obtained.

The total number of ova collected was 5,275,000. On November 6, Mr. F. Burgess transferred 1,040,000 to the Windsor hatchery and on November 10, Mr. A. W. Holroyd obtained 1,250,000 for Charlottetown. The balance of 2,985,000 were placed in this hatchery. On March 29, 470,000 of these were delivered to Mr. Alex. Finlayson

at Newcastle to be transferred to Ottawa and other western hatcheries.

This shows that the ova collected here last autumn was	as divided	as follows:—
Windsor hatchery, N.S		1,040,000
Charlottetown hatchery, P.E.I		
Western hatcheries		
Miramichi hatchery		
Total		5,275,000

Deducting 75,000 as the number of bad ova picked out during the winter months,

leaves a balance of 2,440,000 in this hatchery at the present date.

The ova were all placed in the hatchery in excellent condition. The temperature of the water at that time was about 42 degrees, from which point it gradually fell to 34 degrees about December 1, and remained at this point with very little variation until about April 25. The first ova laid down usually reach the eyed stage about February 1. From this date the embyro gradually shows more plainly until about May 10, when they usually begin to hatch. At this time the temperature of the water has risen to about 36 degrees, and from then until May 20, rises to 48 degrees and at that date the ova are all hatched, except in seasons that may be cold and backward. During the time the fry remain in the hatchery until distribution is completed, the temperature varies from 48 to 58 degrees. The records are kept of the temperature and periods of hatching for the past twenty years. And those that were taken this season show very little variation. The ova are at present in a healthy condition, with the embryo well formed, and there is every reason to believe there will be a large yield of strong, vigorous fry bred therefrom, for distribution on the planting grounds of the adjacent waters.

In connection with the distribution of fry from this hatchery it is felt that it would be an improvement and a step in the right direction, if there were two small auxiliary hatcheries erected on the head waters of the two branches of the Miramichi. The eyed eggs could be safely carried to them on sleds over the lumberman's roads during the month of April. These buildings could be conveniently placed, so that the fry hatched therein would be deposited direct from the breeding troughs on to the planting grounds in the immediate vicinity. This arrangement would greatly

tend to do away with the present system of distribution with teams and wagons. The buildings required for this purpose need not necessarily be expensive as they could be constructed of material growing where they would be erected. By having these small hatcheries in the immediate vicinity of the planting grounds would also prevent any danger of loss by carrying fry in cans for long distances over rough roads on wagons. Then again by the introduction of these auxiliaries, the output of fry in the streams that are now being stocked would be nearly doubled with very little increase in the expenditure, as between three and four millions of ova could be carried in the hatchery until well advanced and then transferred therefrom to the small hatcheries near the planting grounds, while it is not feasible to care for over two millions of fry, in the same space, from hatching time until distribution.

In conclusion I am pleased to state that fish breeding is receiving the hearty and enthusiastic support of the fishermen and anglers in this vicinity, and great interest is

manifested in the work carried on at this hatchery.

The beneficial results of planting large numbers of young fry every year is plainly shown by the undiminished catch of fish each season, notwithstanding the fact that

the number of fishermen and anglers is always increasing.

The salmon fishery of these rivers is in an excellent condition. Large numbers of parr are seen in the small streams and tributaries where fry are planted and thousands of grilse enter the rivers each season, showing that the future supply of adult salmon is assured. It is the general opinion of all with whom I have conversed that the work carried out at this hatchery is greatly conducive to these satisfactory conditions, and that the government will be acting wisely in encouraging every legitimate suggestion to improve the efficiency of the institution and thereby obtain the best results.

I am, sir,

Your obedient servant,
ISAAC SHEASGREEN,
Officer in Charge.

# 9. ST. JOHN RIVER HATCHERY.

GRAND FALLS, N.B.

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture,

SIR,—I beg to submit the following report on the operations carried on at the St. John river hatchery between April 1, 1908, and March 31, 1909.

We hatched at this hatchery last season 1,450,000 salmon and 50,000 salmon trout. Mr. Finlayson, Dominion Inspector of Fisheries, also took from here 250,000 salmon eggs.

The young fry were successfully planted in the following waters:—

Salmon—	
Skiff Lake	 250,000
Tobique River	 300,000
Magaguadavis River	 200,000
Salmon River	300,000
St. John River	 350,000
Fredericton	 50,000
	1,450,000
Salmon trout—	
Skiff Lake	 40,000
Little River	 10,000
	50,000

We started distributing the young fish on June 8, finishing June 27. This is the usual time each year, there being only a difference of a few days each season.

After the distribution of fry the house was cleaned, some necessary repairs made, and everything got in readiness for the fall supply of eggs. These were received from the Little River Pond at St. John, N.B.

On notification from Mr. Mowat, I went to St. John, returning on November 3 with six cases of eggs. These were put down in the hatching troughs, the same night, in excellent condition.

I again went to St. John for the last of eggs on November 13, and returned the following day with six more cases of eggs. These also were laid down in the troughs the same night in good condition. This gave us a total of two millions six hundred and seventy-eight thousand (2,678,000), and is the largest number of salmon eggs ever hatched in this hatchery at one time.

Up to the present the eggs have done very well, and we have every prospect of turning out a large quantity of young fry. The eggs reach the eyed stage here in March, about the 20th, some one hundred and twenty-five days after being placed in the hatchery troughs, and are turned off the trays about May 20, sixty days later.

The eggs are quite late in breaking, but after hatching, the young fish grow very fast, and are ready for distribution early in June. We have very little loss in shipping, even in very warm weather, as we always carry a supply of ice. I consider this of the greatest importance in carrying young fry, especially when travelling long distances.

I am, sir,

Your obedient servant, F. J. McCLUSKEY, Officer in Charge.

## 10. SHIPPEGAN HATCHERY.

SHIPPEGAN.

F. H. CUNNINGHAM, Esq.,
Superintendent of Fish Culture,
Ottawa.

SR,—I have the honour to forward my annual report on the operations of this hatchery for the season of 1908.

Female lobsters were scarce, but one hundred and forty millions of eggs were

collected by us, 60 jars being filled the second time.

As last year, I put several millions of eggs in a case made of wire mesh, which I anchored in the channel and allowed to hatch under natural conditions. I used this process in order to retain some jars for the eggs collected at the end of the season, as these were of better quality than the first ones, which were delayed by the cold weather.

The first fry were noticed on June 13, but on account of a storm which had made

the water cold, the hatching stopped for several days.

All the eggs were hatched on July 9, and the hatchery closed on the 14th of the same month. We have yet to paint the tanks inside after they dry, and a few other repairs are necessary.

We began operations about May 1, but did not start pump until 12th, after the

ice had gone out.

I have the honour to be, sir, Your obedient servant,

SEBASTIEN SAVOY,
Officer-in-Charge.

# 11. SHEMOGUE LOBSTER HATCHERY.

CAPE BALD.

F. H. Cunningham, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—I have the honour to submit the sixth annual report of the Shemogue lobster hatchery, and in so doing I must say that on account of scarcity of spawn, I cannot give as good a report as obtained in the previous year's operations.

The spring supply of lobsters on our shore was deficient, and the lobsters of small

size in the latter part of the season.

The early warm weather also caused the lobsters to shed earlier than usual, and at sea, before coming in-shore. I remarked this feature of the parent lobsters, especially after the middle of June. The boats attended to factories very carefully, and brought in 124,000,000 eggs in good condition. We noticed the first fry in the tanks on June 10, nine days earlier than last season, and having had a warm season, the young lobsters developed rapidly, and were liberated in a healthy condition on the usual ground, from near Cape Tormentine, east to Casey Cape west.

We have used every economy in running the hatchery this season. The pipes have been taken up and cared for, the hatchery properly cleaned, and everything laid away

in readiness for next year's operations.

I have the honour to be, sir, Your obedient servant,

NAP. S. LEBLANC.

# 12. ST. JOHN RETAINING POND.

St. John, N.B.

F. H. CUNNINGHAM, Esq., Superintendent Fish Culture, Ottawa.

SIR,—It is with pleasure that I submit this report on past season's operations at St. John retaining pond, it being the most successful since I have been in charge. Having been instructed by department to prepare for season's operations, work was commenced on June 1. By the 11th we were ready to receive salmon and on this date we collected some sixty odd fish. Continued taking fish until August 16, by which date we had 1,800. During the period of collection the staff consisted of eight men. These, with one or two exceptions, were old and experienced hands. From August 16 to October 19, but two men were employed, the day and night watchmen. On October 19 we commenced getting ready for the most gratifying part of the work, the stripping of salmon and securing the eggs. From the number of fish on hand we expected about seven millions of eggs. This turned out to be a conservative estimate and the staff and myself were pleased indeed when we had secured the handsome total of 8½ millions, which were distributed amongst the hatcheries located at Bedford, N.S., Gaspe, P.Q., Grand Falls, N.B., East Margaree, N.S., with a small

allotment to Restigouche. At least one million more than ever before in the history of the pond. While the latter work was being performed eight men were employed besides a night watchman. We also required the services of a team with driver. By the time the fish were ripe, Mr. Alex. Mowat, of Restigouche hatchery, was on hand to assist with the operations, which he did most efficiently.

All the hatchery men expressed pleasure that they were getting a larger supply of eggs than usual and were pleased that they were getting their eggs in such fine condition. During the summer months we had numerous visitors; among them the Deputy Minister of Marine and Fisheries, Prof. Prince, of the same department, S. F. Morrison, of Government Shad Commission, and others. It is pleasant indeed to be connected with this work, which, since taken in hand by the department, has brought salmon fishing back to what it was twenty-five years ago and those fishermen, who were skeptical some years ago as to what the result would be are hard to find to-day.

I have the honour to be, sir,

Your obedient servant,

J. F. BELYEA,

Officer in Charge.

# 13. KELLY'S POND HATCHERY.

SOUTHPORT, P.E.I., March 31, 1909.

F. H. Cunningham, Esq., Superintendent of Fish Culture, Ottawa.

Sir,—I beg to submit my report of the operations at the Kelly's Pond Hatchery

for the fiscal year ending March 31, 1909.

On April 1, 1908, the salmon and trout fry had nearly absorbed their sacs and were strong and healthy, on April 27 we began to distribute. We supplied Winter river, North river and Wheatley river with salmon fry by team, also Lake Verde, Wisner's pond, and Thompson's pond with trout by team direct from the hatchery. For all the other rivers we had to haul the fry to Charlotteown, ship them from there to the nearest railway station, then by team to their destinaion. We made a rule to change the water as often as possible in transit and found that it improved the fry very much. I may say that Morell and Winter rivers have great numbers of young salmon and also Black river, where salmon have not been for many years.

The fry were distributed in the following places:-

#### TROUT.

Coffins pond, Kings county	12,500
Lake Verde, Queens county	12,500 12.500
Wisner's pond, Queens county	
Thompson's pond, Queens county	12,000
	50,000

#### SALMON.

North lake, Kings county	30,000
Morell river, Kings county	200,000
Neufrage river, Kings county	100,000
Fortune river, Kings county	100,000
Murray river, Kings county	80,000
Winter river, Queens county	200,000
Wheatley river, Queens county	60,000
North river, Queens county	
Dunk river, Prince county	80,000
	000 000

On November 4, 1908, I left for Mirimachi to get my supply of salmon eggs, but was detained there some days on account of the retaining pond being frozen over. On November 11 I returned from Mirimachi and brought with me 14 million salmon eggs which were placed in the troughs the same night, completely filling the hatchery, and which were laid down in splendid condition. The first part of the winter the water was clear but cold, the temperature averaging about 38 degrees; consequently it has kept the hatching late, and even up to the present time it keeps much the same. The eyes began to show on February 6, 80 days from the time the eggs were put in the hatchery. The first young fish appeared on March 3, 111 days from the time they were put in the hatchery, or 25 days after the eyes appeared. At the present time, owing to the thaws, the water is very dirty, so that the trays and troughs require constant washing.

I am, sir.

Your obedient servant.

A. W. HOLROYD.

# 14. CHARLOTTETOWN LOBSTER HATCHERY.

BLACKBURN POINT, P.E.I.

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa.

SR,—I beg to submit my report of the operations at Blockhouse Point lobster

hatchery for the year 1908.

The hatchery opened for work on May 11, the tug making regular daily trips up to June 16. After that date I sent her out three times a week, as the spawn was getting scarce. The first fry appeared in the jars on June 25, and continued hatching till July 9, when we closed down for the season. From June 20 to 25 we had very stormy weather, which made the water very muddy. We had great trouble in keeping the jars clean, and I am afraid it injured a good deal of the spawn.

I am pleased to say that the packers report that small lobsters were never so plentiful as this year. They give as a reason for the scarcity of spawn that the lobsters were too young. The hatchery and plant are in good condition and will not

require any repairing.

The men are now engaged in taking in the suction pipe and trestle-work and in cleaning the jars and machinery. Everything will be left in good order.

The :	fry	were	distributed	in	the	following	places:-
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· · · · · · · · · · · · · · · · · · ·	
Southwest reef, St. Peter's island	12,000,000
Canoe cove, east and west	15,000,000
Point Prim	
Seal rock, Governor's island	10,000,000
Holland cove	
Keppock reef	7,000,000
	63,000,000

I have the honour to be, sir, Your obedient servant,

A. W. HOLROYD.

# 15. TADOUSSAC HATCHERY.

TADOUSAC, P.Q.,

F. H. Cunningham, Esq., Superintendent of Fish Culture, Ottawa.

SIR,-I have the honour to submit my annual report on the salmon-breeding

operations at Tadoussac for the year ending March, 31, 1908.

In the first days of April, 1908, 700,000 salmon eggs were sent to the Ste. Marguerite subsidiary hatchery. From the Tadoussac hatchery to the chateau of the Ste. Marguerite salmon club, the boxes of salmon eggs were transported on spring sleds drawn by horses, and from the chateau to the Ste. Marguerite hatchery by men on snowshoes with toboggans. As last year this subsidiary hatchery has been a success, and the salmon fry have been planted in the Portage river, a tributary of the Ste. Marguerite river, on June 14 and 15, the hatchery cleaned up and closed for the season. At the Tadoussac the salmon fry have been distributed in June in the following rivers and lakes:—

Jacques Cartier river	100,000
St. John river	
A Mars river	200,000
Little Saguenay river	200,000
Baude river	
Chisholm river	300,000
Bark Cove stream	
Long Lake	
Gobeil's Lake	
-	2,300,000
At the Ste. Marguerite hatchery	700,000
_	3,000,000

In the tributaries of the Saguenay river, the distribution of the salmon fry has been done with the assistance of the tug boat *Marie Louise*, of Chicoutimi. As usual our two salmon fisheries for the capture of the parent salmon were set in May, one at

Point Rouge on the St. Lawrence river, and the other in Bark Cove, on the Saguenay river, and up to the end of the fishing season, had only caught 300 parent salmon; 190 females and 110 males, the smallest catch of parent salmon for a good many years. The cause was not the scarcity of fish, but the want of east wind during the fishing season. It is well known amongst the salmon nets fishermen, no east wind, no salmon. With the southwest or the northwest winds, the water keeps too clear, and the salmon in coming up, keep a certain distance from the shore, and escape our nets. It is the contrary with the east wind, always rough, as the water gets darker and troubled, and the salmon keeps nearer the shore. At the spawning time, from October 26 to November 10, our 190 female fish yielded 1,912,000 eggs, which hatched out with a very small percentage of loss. The 15th of January we could see plainly the eyes of the embryo. The temperature of the water as soon as the ice is formed on the hatchery lake at the end of November, is 34 degrees in the tank close to the mouth of the iron tube from the lake, and 35 degrees all over the troughs, and generally in the first days of May, when the water gets to 42 degrees, the eggs begin to hatch. During the winter by authorization of the Department of Fisheries, I had a good substantial camp made on Long lake for the reception of salmon eggs. The camp is 45 x 27 feet with upright posts in different parts and filled up with logs. The ground floor is furnished with 60 troughs 10 feet long, placed in two rows, having a hatching capacity of 1,500,000 eggs. The young salmon will reach the St. Lawrence river by the Bergeronne river. new subsidiary hatchery will be of great advantage in the distribution of salmon fry, which can be distributed from this point at a much reduced cost than if they were distributed direct from Tadoussac hatchery. In July last, 1908, I had occasion to visit Lake St. John, and I am pleased to report that I had encouraging news of our salmon fry and salmon eggs sent to the Roberval hatchery, the property of H. J. Beemer, Esq., for the benefit of the above named lakes. Mr. St. Felicien, on the big River Ashuapmouchouan, Mr. Alfred Drolet, the proprietor of the Chibougamon Hotel told me that a great many fine sea salmon have been caught in the last named river and also in the River Mistassini. The Reverend Mr. H. Hudson, curate of the parish of Murray Bay, told me that the caretaker of his farm situated on an island in the River Ashuapmouchouan, Mr. James Savard, took in one fishing (7) seven sea salmon of the weight of eight to ten pounds. At the Commercial Hotel in Roberval, Mr. Gedeon Boivin told me that Mr. François Boudreau of the Island of Alma took a good many sea salmon in the Grand and in the little discharge of the Lake St. John.

Last summer I met at the kiosk of the salmon pond of the Tadoussac hatchery Mr. I. B. Petit, a merchant of the town of Chicoutimi, and he informed me that two of his friends caught some fine big salmon in the Grand Discharge above the Shipshard river, where, he also stated, salmon were not known to have been caught previous to that time. There is not the slightest doubt of the success of our salmon in the rivers of Lake St. John. To give an idea of what can be done in fish-breeding, I may say that in the year 1897, in November, I planted in the artificial hatchery Lake of Tadoussac about three hundred (300) parent smelts brought from the Duck river. They have been increasing enormously since. Some years ago, during February, a school of smelts came down from the hatchery lake by the iron tube. In going to the hatchery in the morning I found many hundred smelts in the big 80-foot tank supplying the water to the troughs of the hatchery. After taking some for a good meal—and they were delicious—I took back the whole lot in my cans for the transport of the salmon fry, and returned them to the lake. In the spring of 1898 Mr. Richard E. Follett, conducting at the time the operations of fish-breeding at the Roberval hatchery, Lake St. John, planted a good lot of smelts in the lake. They have increased since in such a way that Mr. B. A. Scott, a lumber merchant of Roberval, told me last summer, on board of one of the boats of the Richelieu Company, that the lake is now swarming with that fine little fish. Two weeks later, being called to River du Loup, I met on board the steamer Champlain, crossing to River

Ouelle, a gentleman of Honfleur, on Peribonka river, Lake St. John, Mr. Louis Dionne, who said that he had seen in the fall of 1907 such a quantity of smelts at the River à la Pipe, to use his own expression: 'The smelts were so thick that a schooner could have been loaded with them.'

I have the honour to be, sir,

Your obedient servant,

L. N. CATELLIER.

## 16. GASPE HATCHERY.

GASPE,

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa.

Sir,—I have the honour to submit my annual report upon the operations of the

Gaspé salmon hatchery during the past season.

As in the season of 1906-7 the eggs hatched out very late, only getting the last off the trays on May 28, but the weather then turning fine and warm the fry developed very rapidly, and I commenced planting them in the rivers on the first day of July, and finished on the 25th, putting them in the different rivers as follows:—

St. John River	594,000
York River	
Dartmouth River	720,000

I am pleased to be able to say that I have never seen the young fry going out in better order than they were last July, and with the large quantities that are being placed in the rivers each year they are well stocked and keeping fully up to their standard.

As I have stated several times in my previous reports, I believe, in fact know, that the bird called the comerant is one of the greatest, if not the greatest, enemy that is known to the young salmon in the Gaspé river, and the government would do well to give a bounty for the heads of the cormorant, shelldrakes and kingfisher, and it would be money well spent in the interest of our salmon fisheries.

My assistant went to St. John, N.B., on Thursday, the 29th October and returned on Friday, the 6th November, with ten cases salmon eggs in first-class condition,

which were at once laid down in the troughs and cleaned up.

Mr. Belyea says there were 2,250,000 eggs in the ten cases, which, I think, was about right, as the trays were very full.

The eggs were all well eyed about the 15th of January, 1909, and we have had

about the ordinary percentage of loss up to the present date.

The water keeps very cold in the hatchery as it rises and runs all the way to the hatchery through a thick bush; consequently it is ice water until about the 10th of May, and some years even later, which no doubt is the cause of the fry hatching out so late.

It takes fully nine months from the time the eggs are taken from the parent fish until they are all planted in the rivers, which makes a long season of constant attendance, while in most of the hatcheries in the Dominion the time of incubation and distribution is over in less than six months.

I have the honour to be, sir, Your obedient servant,

R. LINDSAY,
Officer in Charge.

# 17. MAGOG HATCHERY.

Magog, P.Q., March 31, 1909.

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa

SIR,—In transmitting you my annual report for the current fiscal year from April 1, 1908, to March 31, 1909, re operations of the Magog hatchery under my charge, I take pleasure in informing you that I distributed from the Magog hatchery last season 1,220,000 fry of different species in very good condition as follows:—

Speckled Trout.	
Lake Grande Fourche	5,000
Atlantic Salmon.	
Lake Memphremagog	10,000
Brome lake	5,000
Orford lake	3,000
Lake St. Hubert	7,000 7,000
Anctil lake	7,000
Lake Massawippi	3,000
Lake Scaswaninipus	3,000
Lake Lyster rearing ponds	55,000
Lake Lyster rearing ponds	
Total	100,000
Grey Trout.	
Lake Memphremagog	200,000
Lake Massawippi	75,000
Lake Orford	40,000
Oxford lake	40,000
Key Pond or Lake Webster	60,000
Smooth Pond	30,000
Brome lake	75,000
Lake Joseph	45,000
Lake Anetil	45,000
Lake Huard	40,000
Lake St. Eloi	40,000
Lake St. Hubert	40,000
Lake Dudswell	35,000 40,000
Lake Denyson	300,000
Lake Lester rearing ponds	
Total	1,105,000
Recapitulation.	
Atlantic salmon transferred to Lake Lister rearing ponds	50,000
Other lakes	45,000
Other takes	
Total	95,000
Grey trout fry transferred to Lake Lister rearing ponds	300,000
Other lakes	805,000
Total	
Speckled trout	5,000

The total distribution of fry from the Magog hatchery for the season 1908 now ended has been 1,230,000.

Owing to the low water in Lake Memphremagog in the fall 1908, I did not collect as many grey trout eggs as in the fall 1907, but I succeeded in collecting from 750,000 to 800,000.

Three hundred and fifty thousand grey trout eggs were sent to the Lake Lester rearing ponds and the balance was deposited in the Magog hatchery. It takes 55 days for the eggs to eye on account of the temperature of the water, which has been 36 to 38 degrees; they commenced to hatch 90 days after.

I also received from the Ottawa hatchery the following:—250,000 salmon trout eggs; 110,000 speckled trout eggs. The eggs are in fine condition.

The speckled trout eggs are all hatched. I beg to inform you that my report would be more complete if I had the Atlantic salmon eggs which I have not yet received, and which I expect to receive shortly, as they prove a success in Lakes Memphremagog and Massawippi and others in this district.

I remain, sir,

Your obedient servant,

A. L. DESERE,

Officer in Charge.

## 18. LAC TREMBLANT HATCHERY.

MONT TREMBLANT, P.Q.

F. H. Cunnngham, Esq., Superintendent of Fish Culture,

Ottawa.

SR,—In compliance with circular letter of 15th inst., I herewith beg to tender my report of the operations carried on at the Lac Tremblant hatchery from April 1, 1908, to date:—

On April 1, 1908, there were undergoing incubation:

650,000 salmon trout eggs. 80,000 speckled trout eggs. 52,000 Atlantic salmon eggs.

The hatching of the eggs at this point takes place very late, due to the extreme coldness of the water flowing through the incubator troughs from November 15 to May, when the fish start to hatch, after which date the water commences to get warm, and consequently the fry develops very rapidly; hence there is no time to be lost in distributing them to the various waters to be stocked. The distribution, despite the many difficulties encountered, was very successfully accomplished, as the following schedule will show:—

Seventy-five thousand speckled trout were deposited in the following lakes:

Lake Sauvage—St. Faustin.

Lakes Cornue and Brume-Nantel.

Lakes Janveau, Beauvais and Small—St. Hypolite.

Lake Truite—Arundel.

Six hundred thousand salmon trout fry were deposited as follows:

Lake Tremblant.

Lake Superior—St. Faustin.

Lake des Sables-Ste. Agathe.

Lake Chatillon-Ivry.

Lake Ethier, Dupuis, North, Long-St, Margaret.

Lake des Iles and Charlebois-St. Margaret.

Lake aux Ecorces and des Pines-Arundel.

Lake Lacoste—St. Jacques.

Lake Pimodau—Nominingue,
Lakes Henry and Bordeau—Huberdeau.

I also planted 50,000 Atlantic salmon in Lake Tremblant.

On November 28, 1908, I received from Wiarton, Ont., 800,000 salmon trout eggs.

March 19, 1909, I received from Ottawa, Ont., 50,000 speckled trout eggs, all of
which are undergoing incubation, and I expect will mature about May 1.

I have the honour to be, sir,

Your obedient servant.

S. J. WALKER,

Acting Officer in Charge.

# 19. ST. ALEXIS HATCHERY.

St. Alexis des Monts, P.Q., March 31, 1909.

F. H. CUNNINGHAM, Esq.,

Superintendent of Fish Culture,

Ottawa.

Sir,—I have the honour to forward herewith my report of the work performed at

this hatchery during the past year.

The distribution of fry during the spring of 1908 was as follows:—Atlantic salmon, 70,000; ouananiche, 50,000; whitefish, 125,000; speckled trout, 432,000; salmon trout, 40,000.

The department must be well aware of the great difficulty which is experienced

in procuring large quantities of speckled trout eggs.

In accordance with your instructions, I left for Lake Shawinigan on September 31 last, with the ordinary assistance, in order to procure the speckled trout eggs for this and other hatcheries, and on reaching the desired spot on the 23rd instant, I provided reservoir in which to place the trout which might not be in spawning condition. We started seining on the 6th October and on the 7th we stripped the fish secured. We proceed as follows:—We strip a male fish for four females and allow the eggs to stand in the milt, mixed with a little water, for about 25 minutes. Then we wash them and pack them in boxes containing moss and bring them to the hatchery. We deposited them in the troughs in good condition on the 10th October, having secured about 800,000 eggs. The eyes appeared on the 25th January, and the first fry on the 25th February. For 40 days these fry are not fed, but after that time we have to distribute or feed them.

Trusting that this report will prove satisfactory,

I have the honour to be, sir,

Your obedient servant.

JOS. ELLIOTT.

# 20. LAKE LESTER REARING PONDS.

BALDWIN'S MILLS, QUE., March 31, 1909.

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—In pursuance of your orders I have the honour to submit my annual report for the fiscal year just closed.

In May, 1908, I distributed in the following bodies of water in good condition:—

Speckled	Trout—Fry.
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Brome lake		 	 	 10,000
Cliff lake		 	 	 10,000
Wattopeka lak				
Breeches and	Sunday lake.	 	 	 10,000
Windsor river				
Otter brook				
Searle's brook				
	-			
				55,000

# Yearlings.

Lake Massaw		rey trout 2,000 almon trout	1
Brome lake.		rout	)
		·	3,000
Magog lake.	Grey	trout 2,000	)
"	Salm	on trout	4,000
			10,000

June 1. I received of Mr. A. L. Deseve, Magog hatchery, the following fry for rearing purposes:—

Atlantic salmon Grey trout		
		350.000

October 1. I received instructions to distribute the above fry—now fingerlings—as follows:—

# 'Atlantic Salmon.'

Lake Massawippi	10,000
Lake Magog	10,000
Lake Lester	10,000
-	20,000

## Gren Trout!

Lake	Massaw Magog. Lester.				۰				 			٠			٠	75,000
																 225,000

# Eggs Received for Hatching.

These eggs were all hatched by February 20, in good condition, sacs are all absorbed, the fry feeding well and growing nicely.

After placing the eggs on trays much care is necessary to keep them clean by removing all dead eggs, which may be known by their turning white, these must be picked out at least once a day.

The greatest care should be exercised in handling the eggs at all times.

The time required for eggs to eye depends on the temperature of the water. At this hatchery, the temperature averages 40° to 42° F. bringing the eggs to that state in 40 days, after that stage has been reached, with the same temperature, 50 to 60 days complete the hatching, each degree colder or warmer, takes five days longer or five days less.

The losses from improper feeding of young fry are greater than from all other causes combined, thus the manner of feeding is very important. Undue haste causes the water to become polluted. Polluted water is very injurious to the young fish, producing inflammation of the gills and a slimy, itching condition of the skin, often causing heavy mortality.

As soon as the sac is absorbed the young fry are ready to take food—the absorbing of the sac depending on the growth of the fish which is governed by the temperature of the water. Where the temperature is regular at 42° to 45° they will take food in about 30 days after hatching. To determine their readiness, a few crumbs dropped on the surface of the water will cause them to strike at them and show evidence that they are hungry.

The liver is prepared by chopping or grinding it very fine, and, if necessary, mix it with water that it may be distributed evenly. After the fish grow to be 1½ to 1½ inches long they begin to take up the food that settles on the bottom of the trough. The young fry are fed five or six times a day, and the food given slowly and sparingly. After they learn to take their food from the bottom of the trough it is necessary to feed them only three times daily, and only what they will eat up clean.

Beef or sheep liver seems to be the most satisfactory artificial food for young fry. The most common diseases of fry are the inflammation of their gills and a slimy skin disease, which may be caused by impure water; the food itself may produce it, especially if stale liver is used, but it generally follows fouling of the water while feeding. By watching the movements of the fish the symptoms of disease can generally be detected before it reaches an alarming stage. If the gills are affected the fish will usually swim high in the water in an uneasy, restless manner, as if gasping for breath, and when this is observed the gills must be examined to see if they are becoming inflamed and swollen.

If a skin disease is attacking the fish they generally indicate it by rubbing themselves on the bottom of the tank or against anything that may be convenient, or by diving down and giving themselves a quick, twisting motion against the bottom of the tank. If the progress of disease is not promptly checked it will soon reach a stage where nothing can be done, and the fish grow weaker every day until they begin to die in alarming numbers.

One of the best remedies for both diseases is salt sprinkled through the water after the tanks are drawn low, and for a bad case of skin disease a half pine of salt for every gallon of water in the tank is used, or about that proportion. The fish should be watched closely and allowed to remain in the salt water until they become restless and begin to turn on their sides. Then, as fresh water is turned on, and the tank filled, a slime will arise and float on top of the water like a white seum.

To keep the fish that are raised in troughs and tanks in a healthy state, it is well to give them a salt bath occasionally, and a small quantity of salt in their food will

at times do them good.

Before closing my report I am pleased to inform the department that the fishing resorts in the tonwship are all well patronized by ardent fishermen. The lakes can boast of some fine club-houses and up to date summer cottages, no doubt due to the great help derived from this department in stocking these waters with fish.

Lake Lester, on whose shore this hatchery stands, is one of the foremost for boating and fishing, drawing large numbers of visitors who pay high compliments to this

most important and interesting enterprise.

I have the honour to be, sir, Your obedient servant,

W. G. BELKNAP,
Officer in Charge.

## 21. NEWCASTLE HATCHERY.

NEWCASTLE, Ont., March 31, 1909.

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa.

Sir,—I have the honour to submit my report of the operations carried on at this hatchery for the fiscal year ending March 31, 1909.

The following schedule will show you the points of distribution, also the number of yearling salmon trout and fry placed in each locality during the spring of 1908:—

Yearling salmon trout-Lake Couchiching at Orillia........ Charlston Lake at Athens..... Bay Quinté at Belleville..... Rideau Lakes at Portland............... Salmon Lake at L'Amable..... 500 Salmon trout fry-Lake Ontario—Hamilton..... 200,000 Toronto............. 200,000 Picton.. .. .. .. .. .. .. .. 200,000 Consecan.......... 200,000 100,000 100,000 Whitby..... 100,000 Bowmanville............ 200,000 Newcastle.....

Lake Simcoe—Barrie	100,000
Lake Huron—Goderich	200,000
"Southampton	200,000
Charlston Lake—Athens	150,000
Rideau Lakes—Portland	150,000
Bay Quinté—Belleville	100,000
Loon Lake—Coe Hill	100,000
" Coe Hill	50,000
Rock Lake—L'Amable	50,000
Rideau Lake—Newboro	50,000
Paradise Lake—Waterloo	50,000
-	
Total 2	,600,000

I beg to inform you that the fry and yearling salmon trout were deposited in first-

class condition in the different waters as scheduled.

We have two nice bass ponds in our hatchery grounds, and with a small expense we could place another, which could be fed by the same stream. The usual number of parent bass were placed in these ponds last spring, but for some reason they did not do nearly as well as in the previous year. The only way I can account for it is that probably they were either too far advanced or not enough male fish.

The young bass, about three hundred, were placed in Nova Scotia waters in the best of condition, but we are hoping, with the experience gained, for a larger return

in future seasons.

We have in our tanks at present about 4,000 yearling salmon trout, a larger number than we had last season. They are now from 4 to 5 inches long and in a healthy condition. From my experience I find that they stand a long journey without any material loss, and I know that good results have been obtained from the planting of such yearling fish as have been distributed from this establishment. The capacity of the tanks will only allow of a limited quantity being held over, but I have been informed by residents in the vicinity of Charleston and Rideau lakes that they are of the opinion that the above named waters have benefited to a large extent by the planting of yearling fish.

We placed in our trays last November the usual quantity of eggs, and owing to the temperature of the water, which does not vary much from 40 to 42, the young fry hatched about the beginning of February and are of a nice colour and in a healthy condition. A quantity of this fry will be retained until next spring, and those that hatched in February we will begin to feed next month. The food consists of ground

liver.

Our greatest loss in the fish that are annually retained takes place during the

months of July and August.

In October last, Mr. Alex. McLeod, my assistant, proceeded to Georgian bay and, acting under the supervision of Mr. A. J. McNab, officer in charge of the Wiarton hatchery, after an absence of three weeks returned with three hundred and sixty trays, or two million one hundred and sixty thousand salmon trout eggs, which were

laid down in the hatchery in good condition.

The percentage of loss during the hatching process was somewhat heavier than during last season, but I am pleased to say at this time that we have in the neighbourhood of 1,500,000 eggs in fine condition and apparently without any appearance of any further material loss. The temperature of the water from December 15 varies very slightly in this hatchery. Previous to this date the temperature ranges from 40 to 47, and afterwards runs about 33 until the hatching process is over. This, I think, is due to the fact that our dam freezes over and the water after that is practically at the freezing point. Quite a percentage of eggs are now hatched, and our distribution will take place somewhat earlier than last year owing to the fact of

gathering our eggs some three weeks earlier than formerly. I may say that the eggs were in the eyed stage about 30 days after they were taken, the temperature of the water in the hatchery being so cold after that time that about 120 days were required for hatching.

In my experience of some ten years distributing fry, I am pleased to note the fact that good results have been obtained in a number of places where the body of water has been small, so that fishermen and sportsmen have an opportunity of noting the results. As an example of this, Potash lake, in Hastings county, Ontario, may be referred to, where, eight years ago, the only fish found were suckers and where, as a result of two plantings, salmon trout are quite plentiful. Charleston and the Rideau lakes may also be mentioned in the same connection.

On March 17 we received from the Ottawa hatchery 50,000 speckled trout eggs, which, I may say, are the finest and healthiest appearing eggs I have ever seen. They are somewhat larger than our artificially bred and of a deeper red in colour. From their present appearance I anticipate good results. In May we procured our usual supply of parent bass, from which we hope to have better results than in previous years. This hatchery is in good state of repair and we hope for a good season of distribution for 1909.

I have the honour to be, sir,
Your obedient servant,
WM. ARMSTRONG.

## 22. SANDWICH HATCHERY.

SANDWICH, ONT., March 31, 1909.

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—I have the honour to submit my annual report on the fish-breeding operations carried on at the Sandwich hatchery for the season 1908-9.

The season began with the distribution of young whitefish fry, 79,000,000 being deposited in the following waters in a fine and healthy condition:—

d III the lone with the control of t	
Point Edward, Lake Huron	5,000,000
Peach Island, Lake St. Clair	5,000,000
Fighting Island, Detroit river	4,000,000
In bay below Fighting Island	5,000,000
Turkey Island, Detroit River	4,000,000
Stoney Island, Detroit River	5,000,000
Bois Blanc Island, Detroit River	10,000,000
In lake below Bois Blanc Island	5,000,000
Pigeon Bay, Lake Erie	4,000,000
Colchester, Lake Erie	4,000,000
Kingsville, Lake Erie	1,000,000
Leamington, Lake Erie	1,000,000
Rondeau, Lake Erie	1,000,000
Port Stanley, Lake Erie	1,000,000
Hamilton, Lake Ontario	1,000,000
Toronto, Lake Ontario	1,000,000
Niagara, Lake Ontario	1,000,000
Belleville, Bay of Quinté	1,000,000
In river at hatchery	20,000,000

As soon as these little fish burst the shell the screens are removed from the jars, and these tiny things, about ½-inch long, find their way through troughs into a large tank which is in the centre of the building, where they are kept until distributed. When the time comes for them to be taken away they are dipped into large tin cans and conveyed by railroad and boat to where they are planted.

Good results are reported from the fishermen living in the vicinity of the waters in which the young fry are deposited year after year. They claim that the increase

of whitefish is due to the hatcheries.

After clearing the hatchery of the young fry, it was thoroughly cleaned and put

in readiness to receive the fall supply of eggs.

We began fishing the first week in November along the Detroit river and in the Bay of Quinté, Lake Ontario, one of our best fishing stations this year being Beis Blanc island.

The parent fish were caught in seines by the fishermen, from which they were placed in racks in the river until ready for spawning purposes. They are then spawned in large tin pans, impregnated, put in large cans and conveyed to the hatchery by steam tug Ranger. Those from Belleville were conveyed by railroad. The first eggs were received from Bois Blanc on the 13th of November and the first shipment from Belleville on the 14th of November. The eggs at this point were collected by Mr. William Hill, under the supervision of Inspector of Fisheries J. M. Hurley.

Ninety-six million twenty-four thousand eggs were collected; 55,418,000 were received from Belleville, and 40,606,000 from the Detroit river; these eggs were all in excellent condition when placed in the jars, through which water at a temperature of 46 degrees is continually running, the period of incubation lasting about 155 days. At the end of fifty days the eyes can first be observed with the naked eye, the temperature of the water then being 33 degrees. The remaining 105 days the temperature of the water gradually increases, being between 38 and 40 degrees during the hatching process.

The attached letters refer to the results derived from the fish-breeding operations

at this hatchery.

I am, sir,
Your obedient servant,
WILLIAM PARKER,
Officer in Charge,

CAPT. WM. PARKER, Sandwich, Ont.

DEAR SIR,—With reference to our conversation of a few days ago, regarding results obtained from the propagation of fish, there is no question but that the large production of fish on the lower lakes the past year is due mainly to the hatcheries.

In this connection I wish to call your attention to one point that came under my direct observation.

I have for a great many years been handling a large percentage of the catch on the east side of Lake Huron, between Sarnia and Goderich. Previous to 1908 the catch of whitefish was so small that we paid no attention to them. In making contracts we might get two or three boxes a week and some weeks not any.

Last season during June and July we have received from the same nets as high as 12,000 pounds in one day. These fish all ran from two to three pounds each (none larger), and were the exact colour of Lake Erie white—very light coloured—while, as you know, the genuine Lake Huron white are darker.

I am thoroughly convinced that this run of whitefish are from spawn taken from either the Detroit river or Lake Erie.

This one proposition ought to convince any man that the hatcheries are a success, and I only wish that there were five times as many.

Very truly,

A. G. McDONALD,

WM. PARKER,

Sandwich, Ont.

Dear Sir,—Regarding the results obtained through the operations of the different hatcheries there is no question that the large production of fish on Lake Erie during the past two seasons was due to the good work of same.

While the catch of whitefish in the Detroit river dropped off in the fall of 1908,

this was due to the blasting at the Lime Kilns Crossing.

I wish to call your attention to the large catches of whitefish in the waters bordering Essex and Kent during the season of 1908, and I look for a large production during this year.

I am convinced that the good results are due to the hatcheries, and would like to see more stations established along the chain of lakes.

Very truly,

JOSEPH ALLEN.

## 23. OTTAWA HATCHERY.

OTTAWA, ONT., March 31, 1909.

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—Herewith I have the honour to submit my annual report of the operations carried on at the Ottawa hatchery from April 1, 1908, to March 31, 1909, including the distribution of fry last spring and the quantities of eggs received since November 1, 1908. As for the number and kinds of eggs received in the seasons of 1907-8, this can be seen in my last report. The season of distribution of fry in the spring of 1908 was very successful, as the following schedule will show:—

# Distribution of Salmon Trout.

Mauve, Gagne and de la Truite Lakes	24,000
Lake Coeur	24,000
Hawk Lake	24,000
Lady and Bark Lakes	24,000
Green Lake	24,000
Koshabogomog Lake	30,000
Lake Sixte	30,000
South Nation River	24,000
Burke Lake	18,000
Lakes Long and Lemmer	18,000
Cooke's Lake	18,000
Lake No. 7	24,000
Lakes Gregoire and Rond	24,000
Lake St. Esprit	24,000
Lac aux Huards	30,000

	12,000
	30,000
	30,000
	30,000
	30,000
	30,000
	30,000
	30,000
	30,000
	30,000
	30,000
	30,000
	12,000
	30,000
	30,000
	30,000
	24,000
	30,000
	18,000
	18,000
11 22	18,000
	18,000
	18,000
	18,000
44, 44, 44	30,000
	996,000

In addition to these, we have shipped 200,000 eyed eggs to the Restigouche hatchery, 10,000 to Brighton, England, 50,000 to St. John river hatchery, making a total distribution of 1,250,000.

# Distribution of Whitefish.

May 1, 1908, to Lake Deschenes, 140,000. In addition to this, we also shipped to the Bark river hatchery 150,000, making a total distribution of 290,000.

# Distribution of Speckled Trout.

To Lady and Bark Lakes	5,000
Crooked Lake	5,000
Hawk Lake	5,000
Mulgrave	5,000
Lake Roberts	5,000
Boyd Lake	5,000
Angers Creek	5,000
Plato Creek	5,000
Echo Beach	5,000
Compeau Fish and Game Club	5,000
Owen Sound Lake	20,000
Tricks Creek	10,000
Commando Lake· · · · · · · · · · · · · · · · · · ·	10.000
Meache's Lake	5.000
Total	05,000

In addition to this, we also shipped to C. B. Sword, British Columbia, 50,000 eyed eggs, making a total distribution of speckled trout of 145,000.

Distribution of Pickerel.	
Lake Mississippi	120,000
Pike Lake	120,000
Dalhousie Lake	120,000
Christie's Lake	50.000
Mamouth Lake	130,000
Yamaska River·	150,000
-	
	690,000
Distribution of Atlantic Salmon.	
Christie's Lake	15,000
Moose Lake	6,000
Meeche's Lake	6,000
Clear Lake	3,000
Rousseau des Sources	6,000
Lake Bernard	6,000
Salmon and Devil Lakes	9,000
Chelsea Lake····································	18,000

In addition we also shipped 150,000 eyed eggs (Atlantic salmon) to New Zealand, 25,000 to Bark river hatchery, 25,000 to Mont Tremblant hatchery, 100,000 to C. B. Sword, British Columbia—making a total distribution of Atlantic salmon, 369,000.

# Distribution of Ouananiche.

No. 1 t W 1	0 000
Meeche's Lake	8,000
Clear Lake	4,000
Lake Pemechanagan	4,000
Christie's Lake	4,000
	20,000

In addition to this we also shipped 10,000 eyed eggs to Dublin, Ireland; 18,000 to Bark River hatchery, making a total distribution of Ouananiche of 48,000.

## Recapitulation.

Salmon trout 9	96,000	
Whitefish	140,000	
Speckled trout	95,000	
Pickerel	390,000	
	69,000	
	20,000	
Total distribution of fry	2,010,00	00
Total output	2.798.00	00

On November 28, 1908, I received from Wiarton, Ont., 1,000,000 salmon trout eggs; January 30, 1909, 200,000 speckled trout eggs; February 6, from Wiarton, Ont., 300,000 salmon trout; March 10, Bark River hatchery, 250,000 speckled trout eggs; March 30, from St. John, N.B., 400,000 Atlantic salmon eggs.

The following list will show the number of eggs shipped from Ottawa hatchery to date:—

February 3, 1909, to Magog	250,000	salmon	trout	eggs.
February 3, 1909, to Magog	110,000	speckled	trout	eggs.
March 12, 1909, to C. B. Sword, B.C			46	66
March 17, Wm. Armstrong, Newcastle, Ont	50,000		66	66
March 18, Alfred Ogden, Bedford, N.S	60,000	66	66	66
March 19, S. J. Walker, Mont Tremblant	50,000	66	66	66

In conclusion, I might say that at the present everything points to a very successful season, and I look forward to a generous distribution.

I have the honour to be, sir,
Your obedient servant.

JOHN WALKER,
Officer in Charge Ottawa Hatchery.

## 24. WIARTON HATCHERY.

WIARTON, Ont.

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—In accordance with the rules of the department, and in compliance with your instructions, I beg leave to submit my annual report of the operations of the Dominion hatchery under my charge for the year 1908-9.

### DISTRIBUTION OF SALMON TROUT FRY.

Bass lake, County Grey	50,000
Lakelet, County Huron	35,000
Tobermory, Lake Huron	200,000
South Bay, Lake Huron	200,000
Swigley bay, near Duck island	200,000
Lion's Head, Georgian bay	300,000
Surprise shoal, Georgian bay	300,000
Cape Croker, Georgian bay	300,000
Griffin's island, Georgian bay	300,000
Hay island, Georgian bay	300,000
White Cloud island, Georgian bay	300,000
Meaford, Georgian bay	300,000
Cape Commando, Georgian bay	300,000
Squaw Point, Owen Sound, Georgian bay	300,000
Vails Point, Georgian bay	300,000
Cape Commando, Georgian bay	300,000
Gravelly Point, Georgian bay	520,000
Oxenden	150,000
Total	4 655 000
Total eyed eggs	
	4,955,000

I am pleased to state that the above fry were planted in first-class condition in the waters herein designated. We are cleaning and painting the interior of the

hatchery and getting everything in shape for the coming season.

According to instructions, on October 12 and 15 left with spawn takers and assistants from other hatcheries for the various fishing grounds, Tobermory, South bay, Providence bay, Meldrum bay, Cockburn island, Kagawong and Killarney, and returned at the end of the legal fishing season with 14,360,000 salmon trout eggs, distributed as follows:—

Newcastle	
Mount Tremblant	. 800,000
Magog Wiarton	
•	14,360,000
Remaining in the hatchery to date, hatched out and good condition	y) 6,000,000
Total fry and eved eggs	8,100,000

It is most gratifying to me, and will, no doubt, be pleasing to you, to know of the large number of salmon trout eggs secured on Georgian bay and how taken. A spawn taker accompanies each tug, and as the nets are lifted every ripe fish is stripped from its eggs and the eggs cared for. The nets are set back after being lifted. The fish are dressed in what they call offal barrels, and these are taken to dumping grounds convenient for that purpose. It is from this waste that we saved 14,360,000 salmon trout eggs. All the fish from which we secured the above eggs were caught in legal season for commercial purposes.

I have the honour to be, sir,

Your obedient servant,

A. J. McNAB,
Officer in Charge.

## 25. SARNIA HATCHERY.

SARNIA, ONT., March 31, 1909.

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—I hereby beg to submit my first annual report of the operations conducted at the Sarnia hatchery.

This hatchery is located at Point Edward and was first put in operation during the Pickerel season in the spring of 1908, the operations for the initial season being under the supervision of Mr. William Parker, of the Sandwich hatchery.

The building is a large brick structure, 70′ x 32′, and very suitably adapted for the purpose. It is conveniently situated on the St. Clair river at a point where Lake Huron empties into the river, and is furnished with all the modern appliances.

The main portion of the building contains all the hatching apparatus, including boxes, troughs, reception tank and 600 glass hatching jars.

The engine room is fitted up with a vertical submerged boiler of twenty-five horse-power, and a Northington pump with a pumping capacity of 300 gallons per minute.

The pickerel were caught in pound-nets, operated by the fishermen of Lake Huron who allowed the officers of the department to handle their fish for the eggs. These eggs were taken in pans, impregnated and transferred to the hatchery in tubs and pails by means of naphtha launches; they were then placed in jars, through which water (the same temperature as the water from which the fish are taken) was kept continually running. This operation is continued until the fish are hatched, which takes from 15 to 18 days. These tiny things find their own way out of the jars through troughs and pipes into a large tank where they are kept until distributed.

We commenced taking pickerel eggs on May 10, 1908, while the work of fitting up the hatchery was still in progress, and continued doing so until the 23rd of the same month, taking in that time 76,000,000 eggs in good condition, which were fully eyed in from eight to ten days, the water being at a temperature of from 43° to 45°. In twenty-one days from the time the first eggs were placed in the hatchery, they be-

gan to hatch freely and were all hatched out by June 15.

We commenced the distribution of fry on June 11, depositing 2,000,000 in Burlington bay, Hamilton, and 49,000,000 in Lake Huron. Besides the above we also sent

1,600,000 eyed eggs to the Ottawa hatchery.

On October 26, according to instructions I proceeded to Killarney, Georgian Bay, in company with my assistant for the collection of whitefish eggs, but on account of adverse weather conditions and the locality being a new one, we were able to collect only 8,000,000 which arrived at the hatchery December 5. We also received 8,750,000 from the Sandwich hatchery on December 2, the temperature of the water at the time being 45°. In about fifty days they reached the eyed stage.

On February 24, 1909, I received from the Sandwich hatchery 8,750,000 eyed eggs and at the present time we have 19,500,000 fully developed eggs in the hatchery. The temperature of the water during the winter months ranged from 33° to 34° and

at the present time is 37°.

The fishermen in this district fully realize the benefit derived from the artificial propogation of fish, as they report the catch of whitefish for the season of 1908 as being the best in twenty years and do not hesitate to attribute it to the planting of from four to five million whitefish fry annually from the Sandwich hatchery for a number of years past, giving as a reason for their assertion that they were planted fish, that they were all medium size and not the Lake Huron species.

At a meeting of the Lambton and Huron Fishermen's Association, held in Sarnia on March 27, 1909, a resolution was adopted which contains the following clause, 'to compel as nearly as possible amongst the members of this association, the retention of all spawning fish in the nets for a reasonable time, for the purpose of obtaining spawn therefrom for hatching purposes and the co-operation of the members of this

association toward the accomplishment of the same.

I have the honour to be, sir,

Your obedient servant,

A. G. LASCHINGER,

Officer in Charge.

# 26. QUINTE BASS PONDS.

BELLEVILLE, ONT.

F. H. CUNNINGHAM, Esq.,
Superintendent of Fish Culture,
Ottawa.

SIR,—In compliance with your request I beg to submit a report of the operations conducted at the Quinte bass ponds for the season beginning April 1, 1908, and ending March 31, 1909.

In April, 1908, a small shipment of bass, which had wintered in the ponds from the previous season, was made to Rice lake, near Keene, thus clearing the inclosures

for the parent fish.

The first parent fish were placed in the Quinte pond on May 2, and the required number was received by the 29th of same month, and were distributed as follows:— Thirty-seven were placed in the pond at Point Ann, forty in the city pond and twenty-six were sent to the Newcastle hatchery.

During the first week in June, hatching commenced and by the middle of the month the ponds were black with fry. On July 13 and 14, the parent bass were removed from the ponds and returned to the bay. They had developed wonderfully in that short time, were larger, well rounded, vigorous and very active. The fry had also grown to an inch in length, had turned grey colour with dark bar on tail.

Owing to numerous applications the department decided to make a shipment of bass to the western provinces last season and in September an express car was prepared with special fittings for the purpose and almost the entire output of the ponds, about five and a half thousand left here about October 1, for the western lakes, where I understand they were deposited in excellent condition.

In addition to the shipment above referred to a small shipment was made last season to Owen Sound and there are still some young bass in the ponds which will be

liberated as soon as the bay is clear of ice.

I am, sir,

Your obedient servant.

J. M. HURLEY,
Inspector of Fishers.

## 27. SELKIRK HATCHERY.

SELKIRK, MAN., March 31, 1909.

F. H. CUNNINGHAM, Esq.,
Superintendent of Fish Culture,

SIR,—I herewith submit my annual report for the season of 1908 and 1909, of the operations in connection with the Selkirk Fish Hatchery, Selkirk, Manitoba.

In the spring of 1908 an effort was made to fill this hatchery with pickerel spawn taken from the Red river immediately adjoining the hatchery, heretofore, during the spawning season there have been large quantities of pickerel in the river, but from some

cause which we were unable to ascertain they did not come up the river in sufficient quantities to be of any use and the project was then abandoned.

On the tenth day of November, 1908, after we had about concluded that the fishing crew would again be frozen out (the river having a heavy coating of ice all over it and which remained for the winter), the fisheries patrol steamer Lady of the Lake, came in, ploughing her way through the ice with about sixty million whitefish eggs, which had been taken at the Little Saskatchewan fisheries. These were soon in the hatchery and were placed in the jars on the same day of their arrival in good condition.

On the fourth day of February, 1909, eyed eggs were first noticed, and by the fifteenth this stage became fully developed, this making a run of ninety-seven days to bring the eyes to this point of advancement. During all this time the temperature had

remained at its winter point of 34° without any change whatever.

From present indications it will be fully May 1st before the hatching season has arrived and perhaps much later, but estimating for that date it will make a run of seventy-five days to complete the second stage, thus making a total run of 172 days from the time of putting in the eggs to the date of hatching. During this time the water has remained at its winter mark, 34 degrees, and will remain so until the ice leaves the river, when it will rise very rapidly.

I have been making careful inquiry from fishermen as to what effect this hatchery has had upon the south portion of Lake Winnipeg, which this hatchery is supposed to feed, and they all seemed to agree that whitefish are much more numerous in the south end than they have been in many years. Not for the last twenty years has there been so many whitefish as at present, and they all seem to unite in giving the Selkirk hatchery credit for this marked improvement. I might mention one point in particular, situated about ten miles from the mouth of the Red river. I am informed whitefish are very plentiful at this point, where in years past only an occasional fish was caught and then only during the spawning season. Much the same improvement seems to be the case from all points on the south from which we have had reports

Our eggs are in splendid condition at this time and the results should be most

I have the honour to be, sir,

Your obedient servant,

F. W. HOOKER,

Officer in Charge.

## 28. BERENS RIVER HATCHERY.

BERENS RIVER, MAN., March 31, 1909.

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—I beg herewith to submit my annual report of the operations conducted at the Dominion fish hatchery, situated at the mouth of Berens river, Lake Winnipeg, for the season of 1908-9.

This hatchery has not been in operation a sufficient length of time to be able to determine what effect it may have upon the quantity of whitefish in this portion of the lake, but during the next few years a decided effect should be apparent, as this hatchery is located in very favourable waters for whitefish.

On the first day of November we received for this hatchery about eighty-five million eggs (whitefish), which were procured at the Little Saskatchewan fisheries, and were conveyed to the hatchery by F.P.S. Lady of the Lake, and were placed in the jars and the hatchery started on its long winter run.

It was expected that we would have another consignment of eggs from the Little Saskatchewan, as they had a large quantity of parent fish in the crates there, and it was only a question of how much time we had before freezing up as to the quantity of eggs we should get; but on the 8th of November when the Lady of the Lake returned she was unable to enter the harbour, owing to ice having formed, and was compelled to proceed to Selkirk without a moment's delay, taking the eggs intended for this hatchery.

As soon as the ice formed in the river (November 6) the temperature of the water assumed its winter mark of 34° and maintained that temperature the entire winter without change. About February 1, the first of the eyed stage was observed and on the 7th, a period of ninety-nine days, it was pretty well completed. We do not from present indications expect to be through with the hatch before May 10, but this will entirely depend upon the time the ice leaves the river as the temperature of the water then rises very rapidly, and hatching takes place immediately thereafter.

Estimating the hatch to be complete by May 10, will make the number of days required in the second stage 92 days, and a total period of 191 days. Should it turn

warmer this may be reduced by a few days.

The hatchery has been running in fine order and the season has been very satisfactory in every way and when the time comes a very fair hatch should be the result.

I have the honour to be, sir,

Your obedient servant,
F. W. HOOKER,

Officer in Charge.

BERENS RIVER AND SELKIRK HATCHERIES, SELKIRK, MAN.

F. H. Cunningham, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—I am pleased to inform the department that I was successful in getting eighty-five million whitefish spawn for the Berens river hatchery and sixty million for the Selkirk hatchery in first-class condition. In fact, I will venture to say that the eggs are the best ever placed in these hatcheries, and should yield well. After being in the jars for about two weeks all are in excellent condition, hardly any bad eggs to be seen. If we could only have hung on at the Little Saskatchewan river a few days longer we would have had spawn to give away, fish were spawning in good shape when we left, but I was afraid to stay any longer owing to the weather, ten inches of slush ice in the river the morning we left for home, which was November 9. We liberated enough fish that day to have yielded sufficient spawn to have filled two more hatcheries.

Altogether we procured eighty-three thousand parent whitefish from one pound

net in the Little Saskatchewan river.

I am pleased to report that all departmental property has been stored away in good condition for another year except a few crates and the dock. I engaged a man by the name of Robert Stagg to take the plank off the dock and place them with the crates on the bank.

I could have had these taken out and placed on the bank of the river by staying there until the next morning, but I was afraid to risk it, and as it was we had to

break the ice all the way from the mouth of the Red river to Selkirk. Dominion fisheries cruiser Lady of the Lake, is layed up in good shape in her winter quarters.

I trust the above report of the work will be satisfactory to the department.

I am, sir,

Your obedient servant,

(Sgd.) W. S. YOUNG,

Inspector of Fisheries.

## 29. FRASER RIVER HATCHERY.

Bon Accord, B.C.

3 630 000

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—During the spring of 1908 the following fry were distributed from this establishment:—

Cohoe. Spring. Atlantic salmon. Speckled trout.	4,590,000 2,095,000 90,000 30,000
Total distribution	10,435,000
Atlantic Salmon.	
Eggs received from the east	100,000
Coquitlam river	2,500
Home lake, V.I	10,000
Nanaimo lake	5,000
Sutton creek, Cowichan	
Kohsilah river	5,000
Comox lake	
Campbell river	
Harrison lake, B.C	5,000
Cowichan lake, V.I	15,000
Lillooet river, B.C	5,000
Coquitlam river	2,500
$Speckled \ Trout.$	90,000
Eggs received from east	35,000
Fry distributed as follows:—	00,000
Coquitlam river	2,500
Brunette river	
Wallace creek, V.I	
Home lake	
Shawinigan lake	
Kohsilah river	
Sutton creek	
	30,000

During last fall, the following ova were collected:-

### Cohoes.

Tynehead creek		
Triggs creek		1,500,000
Cultus lake·	٠.	500,000
Chilliwhack river		4,048,000
CHIHIWHACK TIVEL		0,012,000

## Sockeye.

The above sockeye ova are still in the hatchery troughs under going incubation, but during the current month, March, 1909, the cohoe fry was distributed as follows:—

Lillooet river	
Coquitlam river	
Hatchery creek	
Silver creek	910,000
•	3,618,000

The sockeye and cohoes obtained from Cultus lake were 45 days in the troughs before they began to eye, and about 120 days in hatching. The water in the creek was of a very even temperature until the middle of December, but in January we had continuous severe frost from the 5th to the 14th, causing our water supply to become very scant, and hard to keep running. From the 5th to the 14th the temperature varied between 10° and 2° above zero. When the weather moderated and the rain caused a freshet in the creek great quantities of mud were deposited in the troughs which gave us much extra labour and consequently greater loss than usual.

I kept over a few of the speckled trout fry at the hatchery to breed from, but lost

most from other trout getting into the pond during a freshet.

The proportion of female fish was greatly in excess of the males amongst the parent fish in the creeks last autumn in both sockeye and cohoe runs, and quite a few of the eggs were insufficiently fertilized which caused much extra picking.

I have the honour to be, sir, Your obedient servant,

WM. ROXBURGH.

## 30. SKEENA RIVER HATCHERY.

LAKELSE LAKE, B.C.

F. H. Cunningham, Esq., Superintendent of Fish Culture,

Ottawa.

SIR,—In accordance with your instructions, I have the honour to submit my seventh annual report of operations in connection with the Skeena river hatchery for the season of 1908-9. The total distribution from this establishment for the season of 1908 amounted to 4,284,000 sockeye fry, which were liberated in splendid condition.

On July 22 Messrs. S. Whitwell, J. B. Johnstone, G. Kelly and myself arrived at the hatchery after a somewhat rough trip, having had the misfortune to have one of our boats full of provisions swamped.

22 - - 21

While polling up the Lakelse river we noticed several sockeyes and on the 25th

we caught two for the house.

After relacquering all the troughs and cleaning out the supply tanks, &c., ready for the season's work all hands left the hatchery for the spawning grounds at Lakelse lake. We found a few sockeyes at the mouth of Sockeye river and a larger quantity at the mouth of the Schalbuckhand river, where we commenced putting in our pens and fences, and had them all put in position on the night of the 30th.

On August 6, we commenced spawning, but only got 30,000 eggs, most of the fish being rather hard and immature, but on the 9th we spawned again and got 104,000 and continued spawning until August 31, when we had 4,348,000 eggs, filling the

hatchery to its utmost capacity.

The run of sockeyes the past season was larger than I have ever seen before, and I am pleased to say there was a great many fish in the lake after we had all the ova we could handle. There is not the slightest doubt but what we have two distinct runs of sockeyes in Lakelse lake now, the fish at the Schalbuckhand river are about twenty-one days earlier than the ones at Sockeye river.

Five years ago there was not any fish worth mentioning at Schalbuckhand, but this last two years there has been all the fish we required for hatchery purposes and a

good quantity left after we had got all the ova we required.

We were very fortunate in securing the ova as early as we did, for on September 1 we had heavy rains which caused the rivers to rise rapidly, and for about six weeks we had high waters, but fortunately we had all our eggs in the hatchery.

We got our fences and pens out in good time and the remaining fish ascended the

rivers to their natural spawning grounds.

There was also a large run of humpbacks, which were first noticed on September 13. On September 28 we had exceptionally high water, but no damage done, the water in the hatchery was very dirty, with considerable mud and slime in the troughs.

On October 21 we had our first snowfall, which continued all day, but did not stay. Everything went along all right with the exception of high water until December 30, when the weather turned very cold and the thermometer dropped down to 4 above zero. Next day the water supply in the hatchery began to get very low, and on investigating at the dam we discovered a very large leak in the centre of the top apron of the dam. Fortunately we had a good supply of cement, &c., and with the addition of some old sails, net webbing and twenty sacks of gravel and cement we repaired the leak, which

raised the water 3 feet 6 inches in twenty-four hours.

It was a very nasty job and all hands were wet and very cold before we finished but it was worth it, otherwise if we had not got it repaired when we did, we cercertainly would not have been able to get sufficient water for the hatchery, the day after we finished the work the thermometer went down to zero and for fifteen days it kept from zero to 16 below, but notwithstanding all the cold weather, we had all the water we required all through the season. After January 15 we had a tremendous amount of snow fall, so much so that on March 3 we had 6 feet 6 inches on the level, but notwithstanding the high water, severe frost and large quantity of snow we had all the ova and young fry in splendid condition all through the season, and I consider the past year one of the most successful ones we have ever had.

I am forwarding you a list of records of the different stages of the ova and fry.

I am. sir.

Your obedient servant,

THOS. WHITWELL,
Officer in Charge.

RECORDS of Sockeye, Ova and Fry at Lakelse Hatchery, Skeena River, 1908-9.

Date.	Ova Collected.	Condition.	When	Eyed.	Commenced Hatching.	Mean Temper'ture of Water.
1908.	80.000			_		
August 6	30,000	Fairly good.	Septembe	er 7	November 5	
11 10	104,000	Good	11 -	11		
12	196,000 250,000	11	1	14		August52°
17	240,000	11	17	14 $16$		Sept'ber46
19	220,000	11	11	18	December 1	
20	250,000	"	11	19		Nov'ber37° Dec'ber35°
0 21	240,000	11	"	22		January34°
22	424,000	11		23	" 22	February 34°
11 24	580,000	11 / 1 / 1	11	27.	25	March35°
n 25	250,000	11	11	28		April36°
					1909.	
11 26	288,000		11	30	January 2	
11 - 27	472,000		October	3	11 5	
ıı 28	212,000	11	11	6	11 8	
ıı <u>29</u>	352,000	11	11	10		
и 31	240,000	11	11	12	ıı 15	

 Number of eggs put in hatchery
 4,348,000

 Number of bad eggs picked out
 54,800

4,293,200 Fry liberated.

When liberated, 10th, 12th and 13th April, all in splendid condition. All Ova hatched on the 10th of March, 1909.

# 31. GRANITE CREEK HATCHERY.

KUALT, B.C.

F. H. CUNNINGHAM, Esq.,
Superintendent of Fish Culture,
Ottawa.

SIR,—I beg to submit the following report on the operation of this hatchery during the season of 1908.

On April 1, the commencement of that season, all the fry of the previous year had been released with the exception of a few late Granite Creek sockeye, the total distribution of salmon fry for the season being 6,740,000.

Early in July about 5,000 young Kamloops trout were released; half in Lake Pinan-Tan, on Reservation Creek about seventeen miles from Kamloops; and half in an unnamed lake in Deep Creek Valley, about twelve miles southeast from Salmon Arm, and about seven miles from Enderby.

These two lakes although thirty-six miles apart are very similar, being each a mile and a quarter long; containing each two islands, and set amid magnificent mountain scenery.

Though barren of trout, they contained a great abundance of minnows, fresh water shrimps, caddie worms, and the many other varieties of trout food. At a water temperature of 50° these trout hatch in twenty-five days or at 451 units of temperature. The ova become eyed in eighteen days, or at 318 units.

22-213

These Kamloops trout of the Shuswap lakes spawn between May 3 and 6, entering the largest rivers that flow into these lakes, and ascending long distances, very few turn into the smaller streams to spawn.

The expense of securing any number in the vicinity of the Shuswap lakes would be great, as at this time the rivers are in torrent carrying the melted snow from the

glaciers and high plateaus.

When one considers that the rush of water from these rivers raises the Shuswap lakes, the combined arms of which give one hundred miles in length by from one mile and a half to three miles in width, from eleven to fourteen feet higher, through the South Thomson river being unable to take the water away fast enough, the state of these rivers at the trout spawning season can be understood.

Skimekin lake which has been stocked twice from this hatchery is too severely fished to permit of its being used as a source for supplying trout ova. It is situated in a lovely but easily accessible spot where the fish therein liberated are caught before

having a chance to propagate.

Two anglers who visited that small lake last year, in a short time got catches of 84 and 83, many of these fish being 20 inches long, but later in the season it had again become almost exhausted.

The first sockeye salmon arrived at Scotch creek on August 14. As expected, in view of the small run of sockeye salmon four years previous, the numbers of these fish that succeeded in reaching their spawning grounds in the Shuswap lake district last season was very small.

Scotch creek, and the hatchery, or Granite creek, seemed to be the only streams where breeding fish were in evidence, and so small was the number that the ova they

provided only amounted to 635,000.

One hundred and twenty-two thousand of these were taken at Granite creek from the dark green sockeye that were unknown in this district until four years after fry hatched from the ova of such fish taken from Morris creek on the Harrison river 293 miles nearer the sea had been liberated here.

These fish were very ripe on arrival and no doubt not having entered the Fraser river early enough to cover the additional 293 miles between their parent stream, and that wherein they had been liberated, the bulk of them ripening on the way, may have given up the journey and turned into intermediate streams to spawn.

Some turned into Scotch creek 55 miles nearer the sea than here, and it is possible that many may have instinctively turned into the Harrison river to Morris creek, which stream their parent fish had in view while they as ova were developing.

However, they now come here every year with the exception of the big fourth yearly seasons, which may be accounted for by there having been no Morris creek ova hatched at Granite creek on any of these big years.

The foregoing applies to the run of adults breeding sockeye.

In all the streams flowing into the Shuswap lakes there were large numbers of small three-year old sockeye males sexually developed permaturely, these were a percentage of the male hatched in the Shuswap waters on the last big run 1905, and had returned a year before their time.

They were of course valueless for propagation their being no females with them. These small males have only the masculine appearance in a comparative degree. The following weights and measurements can give an idea of the difference be-

tween these and the mature four year old fish.

Two Granite creek sockeye females after being stripped of ova weighed 64 pounds and 4 pounds, and measured 251 inches and 221 inches.

Two Granite creek males weighed six pounds and seven pounds, measured 24

inches and 25 inches. Two Granite creek three-year-old sockeye males, prematurely developed sexually, weighed 21 pounds and 21 pounds, and measured 16 inches and 18 inches.

One small three-year-old sockeye taken from about 400 similar males at Scotch creek, weighed one pound and fifteen ounces, and measured nineteen inches.

The salmon ova placed in hatchery was as follows:-

From Scotch and Granite creeks-

Sockeye.       635,000         Cohoe.       529,000	
From Harrison, 1st shipment— Spring salmon	
From Harrison, 2nd shipment—	
Spring salmon	
Dog salmon	
Sockeye	

The percentage of dead eggs was very small. The dry pan was used and every care taken to prevent slime from the skins of the fish while being stripped from coming in contact with the absorbent ova.

It is, however, possible that a very small percentage of ova may be killed by worms within the egg itself.

These white worms are about the thickness of a horse hair, and if straightened out might measure an inch in length.

They are, however, closely curled, and appear as a flattened spiral between the embryo and the inclosing skin of the egg.

The curl is frequently so close and regular that they sometimes resemble a small chain. Sometimes two are found in one salmon egg. They do not necessarily kill the embryo, as an egg ready to hatch sometimes contains both the living fish and a worm.

But the death of an egg sometimes begins at a worm, and is noticed by the albumenous lubricant surrounding the embryo, and upon which the worm seems to feed, first losing its transparency and becoming opaque within the worm's fold.

Not having a microscope I have been unable to make any close study of these worms, to find if they bear any relationship to the long, curved, white, wiry worms that are sometimes expressed with the ova from the salmon; or to determine whether they are tapeworms, but in support of the possibility of their being tapeworms, I would refer one to the *Medical Council* of March, 1909, published 4105 Walnut street, Philadelphia, wherein Dr. T. R. Mason, of Sugar Grove, Ohio, tells of two cases being brought to his notice of tapeworms having been found in the white of the eggs of domestic hens: one an inch long with nineteen segments having been found on November 24 last.

This possibility is also strengthened by the presence of tapeworms in all trout of the Shuswap lake section.

I never succeeded in finding any in trout from the Columbia river watershed, although these have parasites behind the fins, and destroying the gills that I have never found in the Shuswap lakes.

The flesh worms resembling small angle worms about an inch long, and which we here believed developed in the salmon after deterioration in the fresh water, I find some in the salmon from the sea, having found specimens in canned salmon put up at a cannery that secures its fish before they enter the fresh water. They are found coiled up in cavities in the muscular tissue.

The salmon fry have again been all liberated with the exception as last year of a few late Granite creek sockeye. They were released under the ice at the mouth of Granite or Hatchery creek in the invariable good condition.

I am, sir,

Your obedient servant,

D. S. MITCHELL.

## 32. HARRISON LAKE HATCHERY.

HARRISON HOT SPRINGS, B.C. March 31, 1909.

F. H. Cunningham, Esq.,
Superintendent of Fish Culture,
Ottawa.

Sir,—I herewith have the honour to submit the annual report on this hatchery for the past season.

On the 1st of September last I was transferred to this hatchery from Pemberton, I am therefore not in a position to report at length on operations between April 1, and that date, but I find from the records that 22,248,000 fry were liberated and 1,440,000 eggs shipped to other hatcheries from a total of 25,839,000 eggs taken the previous fall. As it was expected that the spawning season of 1908 would be the poorest in the four cycle which prevails on the Fraser river, extensive preparations had been made by my predecessor at all points on the lake to secure as many eggs as possible, but as the season advanced and very few fish made their appearance our fears proved to be well founded, only 500,000 eggs being taken up the lake.

To add to our discomfiture, Morris creek, which in the past had always been good for ten million disappointed us by only yielding five and a half millions; these eggs in addition to one million taken from Trout creek at the hatchery, and 300,000 from Silver and Douglas creeks comprise the total take of sockeye for the season.

An abnormal run of spring salmon to the Harrison Rapids, however, enabled us to fill the hatchery to its normal capacity in bulk if not in number and also to spare one and a half million eggs to Bon Accord and one million to Granite Creek hatchery.

Gill-nets were used entirely in taking the parent fish on the rapids and though this mode of capture is not to be recommended, still it is the only way to work these grounds efficiently and economically. Three boats and nets were employed and the fish were placed in submerged crates when taken from the nets, the crates were then towed to a central spawning station where the ripe fish were stripped and the others placed in pens to ripen.

Two of the boats drifted alternately over the same course day after day, for over a month taking from ten to fifty fish each drift; this will convey some idea of the prolific nature of these spawning grounds.

Nine million spring salmon eggs were taken in this way and conveyed ten miles to the katchery, but it was found that they were much more difficult to impregnate than sockeye eggs, and even after being steeped in the milt for thirty minutes at least 10 per cent were found to be infertile. The total collection of eggs for the season is as follows:—

Sockeye.	
Morris Creek 5,500,000	
Trout Creek 1,000,000	
Silver and Douglas Creeks 300,000	
	6,800,000
Spring. -	
Rapids and Silver Creeks	9,200,000
Coĥoe	
Total	16.500.000

The eggs came through the severe winter well and hatched in an average of 93 days. The temperature of the water fell to 32° in January while the average was 8° below zero; during this time it was found necessary to erect stoves in the hatchery to prevent the troughs freezing up.

Previous to hatching all the eggs were remeasured and evenly distributed throughout the hatchery, this insured an even number of fry to each trough which is neces-

sary to prevent suffocation.

After being rebasketed very few eggs were picked out, so that the number of eggs in the hatchery then would almost be the fry output which is as follows:—

Sockeye				
Spring				
Cohoe	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		450,000
			-	12.100.000

The usual custom of letting the fry out through the ponds was not followed, as the waste ditches and ponds were found to be getting leaky, instead, a temporary flume and pipe were connected to a portable tank which was moved from trough to trough as the fry were ready to liberate.

A number of each of five varieties of salmon will be kept in the troughs as long as the temperature of the water will permit. There is fry in the hatchery now hatched from eggs taken last fall which have attained a length of three inches through systematic feeding on liver and clams. Efforts will be made to take Steelhead eggs on Chehalis river this spring and the Chehalis lake region will be looked over during the summer to ascertain the extent of the early run of spring salmon which ascends the Chehalis in May and June.

The coming season is what is locally called the 'big' year, which means that the sockeye salmon will be numerous in the lower Fraser river, but whether recently enacted fishery regulations will protect them sufficiently to allow a fair proportion to reach the spawning grounds remains to be seen, and upon this depends entirely the success of the hatcheries.

I am, sir,
Your obedient servant,
ALEX. ROBERTSON,

### 33. PEMBERTON HATCHERY.

LILLOOET, B.C., March 31, 1909.

F. H. Cunningham, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—I have the honour to submit the following report on the operations of this hatchery for the season just passed. The liberation of fry for the season of 1907-8 was started on April 25, and by the first of June the young fish had all left the troughs.

The method followed here being to remove the gates from the troughs and allow the fish to leave of their own accord, through a series of small ponds directly to the Birkenhead river which they pass through on their way to Lilloet lakes, seven miles below here. The distribution for 1908 amounted to:—Sockeye, 18,300,000; cohoe, 1,300,000.

Three fences were again placed in the Birkenhead, two at the hatchery and a third three miles below, which is used in the latter part of the run.

The first sockeye arrived on August 25, and spawning was commenced September 1, ending October 7. Between the above mentioned dates, 20,757,000 sockeye eggs were secured.

The following table shows the number of sockeye eggs taken with dates:—

TOHOWINE		10.000
Septembe		12,000
- "	4	176,000
66	5	192,000
44	7	336,000
"	8	190,000
66	9	248,000
"	10	416,000
"	11	600,000
"	12	260,000
CL.	13	760,000
"	14	1,072,000
"	15	620,000
66	16	640,000
cc	17	424,000
"	18	476,000
"	19	880,000
"	20	780,000
"	21	1,377,000
"	22	1,060,000
"	23	1,110,000
66	24	889,000
"	25	680,000
"	26	690,000
"	27	700,000
. "	28	1,130,000
"	29	1,150,000
"	30	1,288,000
October	1	708,000
66	2	800,000
"	3	500,000
"	5	325,000
66	6	163,000
"	7	105,000
	Total sockeye	20,757,000
	Less bad eggs picked out	2,510,000
	Fish hatched	18,247,000

One million cohoe eggs were also taken from which 890,000 fish were hatched. At no time during the season were the fish plentiful, and had it not been for favourable conditions this number of eggs would not have been secured.

A considerable number of small male sockeye were noticed here. The eggs were all placed in the hatchery in good condition, the first pickings being very light.

The outside hatcheries were used to relieve the troughs as the eggs-hatched, several ponds were also constructed in the edge of the Birkenhead and into these and the outside hatcheries over five millions of the young fish were placed.

Part of these fish have already gone owing to the temperature of the water being higher than in the hatchery.

When the first eggs were placed in the hatchery the temperature of the water was 49 degrees, the first eggs reached the eyed stage in 35 days, and started hatching on the 90th day. The last eggs taken finished hatching on March 20, having taken 175 days, and the first hatched in the hatchery are rising. No trouble was experienced with our water supply although the thermometer went down to 11 degrees below. In conclusion must say that the staff have given all the help possible.

I have the honour to be, sir,

Your obedient servant,

T. W. GRAHAM,

# 34. RIVERS INLET HATCHERY.

RIVER INLET, B.C. March 31, 1909.

F. H. Cunningham, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—I have the honour to submit to you herewith my report of the operations

at this hatchery for the year ending March 31, 1909.

In continuation of the work of the season 1907-8, I liberated in the months of April and May, 1908, 8,594,000 sockeye fry. Part of these were planted in the Wannock river and part were put into the ponds at the hatchery, from where they made their way to the lake.

The fish placed in the ponds thrived remarkably well; far better, in fact, than if retained in the hatchery troughs. They grew quicker and became good strong swimmers before leaving for the lake. All of them were quick and smart in their movements and had attained a larger size than they could possibly have done had they

been planted out from the hatchery.

The Indians and others informed me that a greater number of young fish could be seen passing down the main river to the salt water in the months of April and

May than they had ever seen before.

The total output for the season 1907-8 was 12,300,000. Later in the summer, with a view to securing a supply of ova earlier in the season, I fenced the Cheeo and Wakwash creeks at the head of Oweekano lake, and about 45 miles from the hatchery. In both these creeks there is a good run of spring and sockeye salmon, the most of them going up in the months of August and September. The fences were completed and the pens filling quickly with fish, when, unfortunately, on September 9, there came a heavy freshet which washed them out completely. The material was all saved and piled away for future use. I had then to depend upon the later runs at Quap and Zenessee creeks to stock the hatchery.

At Quap creek the work of stripping commenced on the 19th September, when 55,000 eggs were taken, and continued until the 3rd of November, when 7,920,000 had been secured. The fish this season were bigger than usual and it was very noticeable that the males were in much greater numbers than the females. The eggs were smaller, measuring 7,900 to the quart, but they were strong and easy to care for. The run was very good, and a great number of fish passed up the creek when the high water came. The temperature of the water in this creek about the time the salmon are there ranges at about 47° F. From Zenessee creek the first shipment was received at the hatchery on September 23, 1908. The work of shipping was continued until

November 2, and 6,493,000 eggs were shipped to the hatchery, making a total from the two creeks of 14.413,000 eggs.

In this creek, as in Quap, the fish this season were above the average size and plentiful, with a large preponderance of males. The eggs were about the same as usual in size and measured 8,090 to the quart. The temperature of the water at this time is usually about 50° F.

On November 4, 1908, a very heavy freshet occurred and the lake rose many feet, the water covering the fences over five feet, and all the fish passed up the rivers and creeks

The run of salmon up the various rivers confluent to the Oweekano lake, though not as heavy as that of 1907, which was an exceptional year, was fully up to the average of previous years, and a very satisfactory number of fish reached all the spawning grounds.

The eggs were all in very good condition on receipt at the hatchery, having been carefully taken and well cared for.

The condition of the weather during the fall of 1908 was colder than usual, and the first ova in the hatchery were not eyed until the 2nd of November, 44 days from the date of their receipt, at a mean temperature of the water of 42.17° F. as compared with 35 days and a mean temperature of 47.30° in 1907-8.

It was not until the 14th of December that the first young fish began to arrive, being 86 days from the date of the receipt of the eggs, the water being at a mean temperature of  $40.90^{\circ}$ , as compared with 74 days at a mean temperature of  $43.04^{\circ}$  F. in 1907-8 and 41 days with the temperature of the water  $38.80^{\circ}$ , from the date of eyeing, as against 38 days in 1907 with the temperature at  $40.10^{\circ}$ .

From this time, owing to the very cold weather, the progress has been slow, and at the date of submitting to you this report, 193 days from the date of laying down the first lot of ova, with the mean temperature of the water at 36.36° F. and 107 days from the date of the hatching of the first fry, with a mean temperature of the water from that date of 33.04° F., there are only about 500,000 young fish that are strong enough to liberate. There are at present about 6,000,000 in the hatchery, and they are showing over most of the house.

I am, sir,

Your obedient servant,
ROBT. C. BERCKNALL,
Officer in Charge.

### 35. BABINE LAKE HATCHERY.

Babine Lake Hatchery, B.C., March 31, 1909.

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—I have the honour to submit the following report on the operation of this hatchery during the past season.

After a very successful season we started putting out the young fry on April 1, 1908, distributing them in all the suitable places in the creek, and had them all out by April 15, a total of 4,662,950.

They all went out in splendid condition, as they had only to be taken a short distance, and there are no trout nor ducks in ehe creek this time of the year.

We then got everything ready for the fall supply of ova, and, leaving one man in

charge, left for the coast and arrived at the hatchery on August 1.

The first sockeye were noticed at Babine lake on July 15, but did not reach Salmon river until July 25. We put our fences in the creek at the head of Gourdeau lake on August 20, but did not let the fish in the pens till August 30, and started spawning on September 5 and continued till September 22 when we took out our fences, moved down and put fences in Salmon river in front of the hatchery as the fish were then ripe down there. We continued spawning till September 28 when we had all our baskets filled.

There was a larger run of sockeye on Babine lake this year than last, but the run on Salmon river was not as large, but we had no difficulty in securing all the

eggs we could handle.

Our first shipment started hatching on November 16, in 72 days, and our last shipment started hatching on February 10, in 135 days, in both cases being two days longer than last year, but as our last shipment was put in the hatchery 18 days earlier than last year all our eggs were hatched by March 25. Our highest water temperature was 52° and our lowest 34°.

We had a very cold winter compared with last year. The thermometer went to —30° on December 31 and stayed from —30° to —42° for 16 days, which gave our hatchery and water supply a good test. We had no serious trouble, but had to keep good fires going in the hatchery night and day, which we continued doing the rest of the season. We also had —43° for a few days in February, but the rest of the season was very mild with only 24 inches of snow.

During the season we built a log house, 15' x 17', at the spawning ground at the head of Gourdeau lake and one 15' x 16' across the creek from the hatchery (for our Indian help). We also cleared about 6 acres of land around the hatchery, which makes a big improvement in light, also a big protection in case of a bush fire.

We also cleared and broke up a garden, which I will have planted this summer. The cohoe run in Salmon river was very poor this season; the first arrived September 5 and the last was seen on November 30.

We liberated 500,000 young fry on March 16, as some of the troughs were too full, and will liberate the rest early in April.

I am, sir

Your obedient servant.

A. W. PRETTY,

Officer in Charge.

Spawned.	Number.	Arrived at Hatchery.		Hatched.		Temperature of water.	
Sept. 5.  " 8.  " 11.  " 14.  " 15.  " 17.  " 19.  " 21.  " 22.  " 23.  " 24.  " 25.  " 27.  " 28.  Total.	268,000 660,000 880,000 980,000 980,000 900,009 400,000 542,000 480,000 532,000 608,000 800,000	Sept.	9	Dec.  Jan.  Feb.	16	Oct. Nov. Dec. Jan. Feb. Mar.	47° 37½° 37½° 35°
Eggs spawned at Head of La Hatchery.	ake			4,230 4,142			
Total Dead eggs picked out	****			8,372 282	,000		
Young fry				8,089	,200		

# 36. STUART LAKE HATCHERY.

STUART LAKE, B.C. March 31, 1909.

F. H. CUNNINGHAM, Esq., Superintendent of Fish Culture, Ottawa.

SIR,—I have the honour to submit the following report on this hatchery for the past season of 1908-9. The quantity of salmon ova taken was 2,600,000 out of which 2,442,000 fry were released. The eggs were placed in the hatchery on the 20th and 21st of October, and I am pleased to say were in very good condition. The fish commenced hatching on April 18, and by May 10, they were all hatched. They were liberated between May 28 and June 2, the fry being allowed to depart when they felt inclined. I found this method to be very successful. I had ponds made outside from the waste water from the hatchery, and the fish when leaving the trough would enter the ponds and from there they would enter the creek. From the time the eggs were placed in the hatchery to the time of hatching was seven months. The temperature of water for October was 47, 48, 35 degrees; for November, it was 35, 42, 33 degrees; for December up to the end of March the water remained at 33 and 32 degrees, when it commenced to get warmer. In April it went up to 48 degrees, and in May it went as high as 55 degrees, and at which temperature the growth of the fry was very rapid.

In the fall of 1908, 10,478,000 eggs were taken, eight million were placed in the hatchery, and the balance planted in Cunningham Creek, as I did not have sufficient room in the hatchery for the number taken. The eggs were procured in Beaver creek, thirteen miles from the hatchery, to which they were transported by pack horse. The run of salmon on Beaver creek was very large, and I could have, without the least

trouble, secured twice the quantity.

I am, sir,

Your obedient servant,

HARRY GIBBS.

## 37. NIMPKISH HATCHERY.

Vancouver, B.C. March 31, 1909.

Department of Marine and Fisheries, Ottawa.

We beg to submit the results of the year's operations at our Nimpkish hatchery for the season of 1908-9. The distribution for the spring of 1908, was 4,800,000 sockeyes.

We were again successful in filling up all our baskets. Number of eggs taken 5,014,000. Fry liberated, 4,900,000, loss 114,000, which we consider an excellent showing. Commenced taking eggs October 3 and finished the 14th. Put out first strong swimming fry March 18, 1909, and the last on April 8. The natural spawning grounds were well seeded, but owing to excessive sise in Nimpkish lake and tributary streams during spawning season, we fear much of the ova was wasted by being left dry by the receding water. Our total output were sockeyes.

Respectfully submitted,
THE B. C. PACKERS' ASSOCIATION,

W. H. BARKER, General Manager.

## APPENDIX 14.

REPORT ON OYSTER CULTURE BY THE DEPARTMENT'S EXPERT FOR THE SEASON OF 1908.

CHARLOTTETOWN, Prince Edward Island.

R. N. Venning, Esq.,
Superintendent of Fisheries,
Ottawa.

SR,-I have the honour to submit to you my annual report on oyster culture of

last season's work in the lower provinces.

After the opening of navigation the Ostrea was removed from her winter quarters, and when ready for sea proceeded to Shediac on the 15th day of May for the purpose of placing stakes around the reserved oyster beds at a distance of two hundred yards to allow the fishermen to fish quahaugs outside the beds as no fishing was allowed within that distance.

After finishing the above the Ostrea was engaged in patrolling the Northumberland straits on lobster protection until the 24th of May from Indian Point near Cape Tormentine along the coast as far as Chockfish and along the island shore west of Cape Traverse, with Fishery Officer Noonan on board, afterwards returning to Charlottetown, where I provisioned, coaled and watered steamer, and left for Caraquet on the 3rd June, the weather being so unsettled and windy, did not arrive there until the 9th June.

### CARAQUET, N.B.

On my arrival here I commenced raking over the oyster area for the purpose of

removing the eel grass which had overgrown the beds.

This area is situated at the head of Caraquet bay and is very shallow; it is about one and a half miles square, two small rivers emptying themselves at the head of this bay. The depth of water varies on these beds, which are saucer shaped, being deepest in the middle, where a depth of nearly four feet is found at low water, the beds becoming shallower as the sides are approached, until the edges are almost dry at low water, and it was around the sides of the bed which occupied most of my time, as the eel grass had grown so thick and could not be worked on at low water, the fishermen claiming some of the best fishing was in the shallow water, but they were unable to use their tongs on account of the eel grass. This put me to a great disadvantage in my work, as I was compelled to leave off about two hours before low water and not start again until two hours flood tide, there being not more than eighteen inches of water at low water spring tides. The weather, too, in this locality is very unsettled and windy, which caused a loss of time. Most of this grass was removed before I left. Caraquet bay is gradually growing up and becoming shallower each year. It appears to me the sand is being carried up by each tide from Mizzenette bar and falls over the whole area. It can be clearly noticed that these beds are becoming more contracted each year, and by using a pole one can feel the oyster beds laying under the sand and sediment, varying from two inches to two feet. There is no remedy for his, as the whole area is gradually silting up. Now, nothing but very small boats can come up to the head of the bay, but years ago schooners and squarerigged vessels were reported to often load here, but they could not do so now.

I made an examination of the beds with a dredge and found the oysters to be scarce. In six hauls I obtained the following: First haul, eighteen large oysters and six small; second haul, eleven large and seven small; third haul, eight large and four small; fourth haul, seventeen large and fourteen small; fifth haul, eleven large and five small, and sixth haul, fourteen large and five small ones.

There are a good number of small oysters growing in both the rivers above the beds, and they are reported that they do not grow very large as they were growing too thick in the bed of the river; the quality, too, is not so good as those on the beds, but if these small oysters were caught and scattered over the area it would increase the numbers and no doubt improve the flavour and size of the river oysters. This transplanting might be done for a reasonable figure, as the oysters are not worth much where they are at present and would give employment to a few men who would catch them. At any rate an experiment would do no harm. The Ostrea continued working here until the 16th October, when I left Caraquet and proceeded with her to Shediac.

#### SHEDIAC, N.B.

These beds were opened for the public to fish on during the week ending the 17th October till the end of the month, and I arrived on the 18th instant. On the 19th and 20th there was too much wind to work, but the men worked the remainder of that week. On the 26th no work was done, it being election day. On Tuesday, Wednesday and Thursday, the 27th, 28th and 29th, fishing was carried on, while Friday and Saturday, the 30th and 31st, no work was done on account of bad weather, which finished the fishing for the season.

With the assistance of the fishery officers I was enabled to obtain the following figures. For the week ending October 17, the figures were as follows:—

Date.	Men.	Oysters.	Quahaugs
	,	Bush.	Bush.
October, 17	91	419	<b>2</b> ,853
21	89	56	389
22	86	39	282
23	42	16	143
24	34	12	117
27	36	13	93
28	38	15	87
29	35	15	90
Totals		585	4,054

The fishermen started operations each day at 8 a.m., and finished at 3 p.m., at a given signal from the Ostrea. Every man was provided with a license who fished on the reserved area. The quantity of oysters taken was small while the number of quahaugs caught was very good. The number of men leaving off work at the latter part of the time was owing to a drop in the price of quahaugs, when I first arrived seventy and eighty cents per bushel was paid; but latterly the price dropped to forty cents per bushel, and several fishermen gave up fishing at the latter price, most of the quahaugs taken were from the edges of the beds, but they raked over the whole area.

These beds should be raked over early next spring as the fishing caused the bottom to become uneven with the continuous raking, and if not done soon the holes are liable to be filled up with sediment. The season was too far advanced to do any more this year as the weather was too wild.

. I left Shediac on November 5 and put into Summerside, bad weather coming on after I started. Left there and arrived in Charlottetown on the 8th instant.

I have since then dismantled the Ostrea, and hauled her into her winter quarters.

## Oyster Barrels.

I have again been asked to respectfully call the department's attention to the different sizes of barrel that oysters are shipped to market in, and all sold as barrel of oysters whether they are large or small. Formerly, oysters were shipped in the regular flour barrel, and that has been the recognized measure for a barrel of oysters, and a large quantity are shipped to-day in the flour barrel, while others use an apple barrel, and again others will withdraw a stave or so from the regular flour barrel, until a person really does not know what he is buying when ordering a barrel of oysters. The flour barrel is much the easiest and cheapest to obtain; but merchants and buyers require a standard size to be recognized by law to prevent fraud. Whether the measure is large or small they care not; but an Act should be enforced relating to a standard measure for oysters to protect both buyers and sellers from being deceived in their purchase. A gentieman in Shediac called my attention to oysters being landed from the s.s. Empress, and said the barrels reminded him more of nail kegs than anything else as they were so small.

The dimensions of an ordinary flour barrel are about as follows:—Seventeen inches top and bottom diameter, with two inches bilge and twenty-five inches deep on the inside, and to contain nothing less than ten pecks. This is a very important matter and I would respectfully ask the department to take immediate action without

further loss of time.

I have the honour to be, sir,

Your obedient servant,

ERNEST KEMP,

Oyster Expert.

## APPENDIX No. 15.

## ANNUAL REPORT ON BAIT COLD STORAGE FOR 1908-09.

Superintendent of Fisheries.
Ottawa.

SRI,—I beg leave to submit my annual report on bait cold storage of the maritime provinces, being the ninth annual report for the year 1908.

This year has not been such a busy one as the past three years. However, we have made some very important changes to existing freezers, to bring them up to the standard of our recent ones. They were Petit de Grat, Port Beckerton and Big Island, all in the province of Nova Scotia, and at Caplin, Quebec, where we made a revolution which has been a great success, and the fishermen are delighted.

We also completed a 30-ton freezer at Lingan, one of 100 tons at Glace Bay; and one of 20 tons at New Carlisle. The accounts for this last freezer have not been sent forward, but I expect to send them very shortly.

The 30-ton freezer at the Racquette, Digby county, N.S., would also have been completed only we were requested to stop work for about six weeks, but it will be completed soon now. We also started work, that is, we built an ice-house at Barrington passage, for a 100-ton freezer early in March last, but work has also been suspended on this one too for an indefinite period.

The following is a complete list of freezers completed to date, with the years of construction, the cost of same, number and amount of bonus paid as follows:—

## PROVINCE OF NOVA SCOTIA.

Name,	Year Built.	Cost of Construc- tion.	Dept. Share.	No. of Bonus Paid.	Amount.
		\$ cts.	\$ cts.	/	\$ ets.
Ballantyne's Cove Pt. Hood Island Bayfield Gabarous Whitehead *Pt. Beckerton Sambro Pt. La Tour Clarke's Harbour Lower E. Pubnico Sandy Cove Ingonish Cheticamp Eastern Harbour *Petit de Grat Westport North Sydney Ketch Harbour La Have St. Peters †Half Island Cove Lockeport Louisburg Drum Head	1900 1900 1901 1901 1901 1901 1901 1901	\$ cts. 1,361 04 1,313 60 1,905 89 1,982 82 963 41 1,404 68 2,246 66 1,380 03 1,202 88 2,061 39 1,427 34 1,604 33 1,277 42 1,491 02 1,723 32 1,600 00 2,038 89 1,401 89 2,260 81 2,036 05 1,816 87 1,788 66 2,290 16 1,649 37	\$ cts.  861 04 656 80 952 94 991 41 481 70 702 34 1,000 00 690 01 601 44 1,000 00 713 67 797 16 638 71 745 51 861 66 800 00 1,000 00 1,000 00 1,000 00 1,000 00 1,000 00 208 43 894 33 1,000 00 824 68	5554353 .4255323333113	\$ cts.  369 06 325 50 470 00 351 50 228 45 356 50 300 00 Sold. 306 00 148 00 492 00 214 05 100 00 461 14 490 25 241 92 194 00 228 25 208 87 156 05 300 00 57 10 80 85 300 00
Quoddy * Big Island Arisaig	1905 1905 1905	857 73 1,388 47 1,064 16	428 86 694 23 532 08	2 2	160 55 200 00

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## PROVINCE OF NOVA SCOTIA-Concluded.

Name.	Year Built.	Cost of Construc- tion.	Dept. Share.	No. of Bonus Paid.	Amount.
Digby Lunenburg. South Bay Ingonish. Half Island Cove. North Cape Breton.	1906 1906 1906 1906 1907	\$ cts 4,441 38 4,544 76 1,551 76 2,273 57 4,142 39	\$ cts. 2,000 00 2,000 00 775 88 1,000 00 2,000 00	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	\$ cts. 200 00 200 00 200 00 200 00
Pictou. Larry's River New Harbour. Alder Point Harbour au Bouche. Lingan Glace Bay.	1907 1907 1907 1907 1907 1908 1908	4,285 27 1,831 84 1,886 52 2,251 08 1,728 62 1,785 29 4,054 45	2,000 00 915 92 943 26 1,000 00 864 31 892 64 2,000 00	1 1 1 1 1 	100 00 100 00 100 00 100 00 100 00
PROVINCE OF	NEW I	BRUNSWIC	CK.	J	
Shediac	1902 1906 1907 1908	1,210 18 1,816 12 1,776 53 1,745 04	605 09 908 06 888 26 872 52	5 2 1 1	420 00 200 00 75 00
PROVINCE OF PR	INCE E	EDWARD I	SLAND.		
Frog Pond. Alberton Souris. Miminegash Rustico.	1900 1900 1901 1902 1903	1,160 18 1,347 67 2,064 39 840 46 1,235 00	580 09 673 83 1,000 00 420 23 617 50	5 5 3 5 4	345 35 450 00 123 85 500 00 400 00
PROVIN	CE OF	QUEBEC.			
Bonaventure River  * Caplin  Anse à la Barbe  Paspebiac  Etang du Nord  Cabin Cove  Maria Capes  St. Godfroy  Gascons  Bonaventure East  Newport Point  Carleton  Point Basse  South Beach	1903 1904 1905 1905 1905 1906 1906 1906 1906 1906 1906 1907 1907	1,416 05 2,122 96 961 12 1,690 83 1,729 80 1,801 13 1,630 46 1,747 01 1,695 42 1,002 81 1,619 59 1,993 81 2,552 32 1,952 47	916 02 1,000 00 480 56 845 41 864 90 900 56 815 23 873 50 847 71 501 40 809 79 996 91 1,000 00 976 23	5 1 3 2 2 2 2 2 2 2 2 2 1 1	435 27 97 00 219 12 198 75 166 00 186 25 162 00 200 00 200 00 100 00 100 00 100 00

<sup>†</sup>This freezer was destroyed by fire.

The freezers marked \* include changes which were made to bring them up equal to our first-class ones.

## SYNOPSIS OF REPORTS OF BAIT ASSOCIATION SECRETARIES FOR 1908.

## FROG POND, P.E.I.

The secretary reports that herring were plentiful during the spring, but none were preserved in ice, although there is a freezer conveniently situated, hence fishermen have been handicapped for want of bait for a considrable part of the season.

## RUSTICO, P.E.F.

The secretary says that the freezer has done good work. Frozen squid and herring were used with good results. Last year frozen herring were used with the very best results in mackerel fishing, and he expects will give still better results this year.

## CAPE GEORGE, N.S.

The secretary says that herring were plentiful, but no ice was put up in the freezer, consequently fishermen suffered by the scarcity of bait.

#### NORTH BAY, INGONISH.

The secretary reports that the freezer proved a great source of benefit this year, and is working to the entire satisfaction of all concerned, keeping the bait in first-class condition. The fishermen, many of whom have been doubtful of the value of frozen bait, are beginning to express their appreciation of the freezer which keeps them supplied with bait when no fresh bait is obtainable.

## KETCH HARBOUR, N.S.

The secretary reports that the freezer here was not operated this year owing to the lack of ice.

## DIGBY, N.S.

The secretary, referring to the bait question, says: that the 100 ton freezer is situated in the wrong place and cannot be taken advantage of by the fishermen here. The proprietor, who has acquired most of the association's shares, is away and has to all intents abandoned the enterprise, the freezer being closed up with no ice or fish in it. The secretary also refers to the unfortunate delay to the Racquette freezer, by which the August run of herring was entirely lost, it not being in readiness.

## DRUM HEAD, N.S.

The secretary reports frozen bait quite beneficial and large stock of frozen herring on hand for supply of local fishermen.

## CLARKE'S HARBOUR, N.S.

The secretary reports good catches of herring all through the season, in a trap. Bait was kept fresh in the freezer, but none frozen.

#### SHEDIAC, N.B.

The secretary says, 'that nothing was done this season so far except to place 150 tons of ice in the freezer during the winter. Fish of no kind has been offered, but they expect to handle the usual quantity of smelts when the season comes round.

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## CARLETON CENTRE, P.Q.

The secretary has great pleasure in acknowledging the goodness of the government in granting such a favour to the fisheries in building the freezer to supply them with bait of first quality, besides keeping all other fish in first-class shape for the markets.

## CAPLIN, P.Q.

The secretary reports that the freezer was not in operation for the previous two years, but last winter the capacity was enlarged and 250 tons of salt water ice put up in February. They were unfortunate in not securing a large quantity of herring in spring as they came in one big run, which only lasted a week, and they could only freeze fifteen barrels per day. They managed to secure a fair quantity of summer herring, and so were able to supply the fishermen almost continuously.

Fishermen here are beginning to give up their unreasonable prejudice against the use of frozen bait, and find now that the operation of the freezer puts money in their

pockets.

#### BONAVENTURE RIVER, P.Q.

The secretary says fishermen did not use any frozen bait this summer, but they will use it in the fall if they can catch any in September to freeze.

## ANSE A LA BARBE, P.Q.

The secretary reports having frozen four tons of herring in May. Fresh bait being scarce during July and August, some fishermen used frozen bait which gave excellent satisfaction. Fishermen are taking more interest in frozen bait and will in future keep a good supply on hand.

## ST. GODFROY, P.Q.

The secretary reports having frozen 60,000 pounds of herring, 15,000 pounds of cod, 1,000 pounds of salmon, and 3,000 pounds of other fish during the season.

## BONAVENTURE EAST.

The secretary reports having frozen 5,500 pounds of herring in May which were of great benefit to the fishery. They expect to freeze several thousand pounds of fish in September.

## NEWPORT POINT, P.Q.

The secretary reports fresh bait plentiful all the season, and no frozen bait used.

## CABIN COVE, M.I.

The secretary reports the freezer filled with herring in May. Some were used in May and June, but the weather was rough for fishing. Only a small quantity was used in July on account of dog-fish.

#### POINT BASSE, M.I.

The secretary reports the freezer well filled with ice last winter. The directors could not hire an attendant for less than \$200, and considering that expense too great,

decided not to run it. Fishermen think, however, that if they could have had bait from the freezer they could have caught many more fish, so an attempt will be made to run the freezer next year.

#### ETANG DU NORD, M.I.

The secretary reports the freezer filled with herring, and most of it still on hand. Fishermen complain of it being soft and difficult to keep on their trawl hooks.

## SOUTH BEACH, M.I.

The secretary reports the fishermen could not get fresh bait after May, frozen and salt bait being used for the remainder of the season.

PETER MACFARLANE.

NEW GLASGOW, N.S., September 10, 1908.

Note.—Many of the secretaries, in reporting, make no mention of the actual work of the bait freezers, but instead, have given a general report of the fisheries within their districts, and as such reports are given to the department by its inspectors, they are not embodied herein.

## APPENDIX No.

## THE OUTSIDE STAFF OF THE FISHERIES BRANCH.

The following are Inspectors of Fisheries in the different provinces of the Dominion, 1908-09.

Name.	P.O. Address.	Extent of Jurisdiction.
Bertram, C. D. (Acting). Hockin, Robt	North Sydney, N.S Pictou, N.S	District No. 1.—Cape Breton Island. District No. 2.—Cumberland, Colchester, Pictou, Antigo-
· ·		nish, Guysboro', Halifax and Hants counties.  District No. 3—Lunenburg, Queens, Shelburne, Yarmouth,
Calder, John F Chapman, Robt. A	Campobello, N.B Moncton, N.B	Digby, Annapolis and Kings counties. District No. 1.—The counties of Charlotte and St. John. District No. 2.—Restigouche, Gloucester, Northumberland, Kent, Westmorland and Albert counties.
Harrison, H. E	Fredericton, N.B	District No. 3.—Kings, Queens, Sunbury, York, Carleton and Victoria counties.
Matheson, J. A Wakeham, Wm., M.D Bernard, C. A Riendeau, Jos	Gaspé Basin, Que St. Césaire	Prince Edward Island. Lower St. Lawrence River and Gulf. Eastern Townships. The counties of the province of Quebec bordering on the
Hurley, J. M	Belleville, Ont	St. Lawrence from Huntington to Three Rivers.  That portion of Ontario east of the western boundary line of the counties of Durham, Victoria and Haliburton, including Lake Scugog and the eastern boundary of
Sheppard, O. B	Toronto, Ont	Muskoka and Parry Sound districts.  That part of the province of Ontario west of the eastern boundaries of the county of Ontario, and the districts of Muskoka and Parry Sound along the Mattawa and Ottawa rivers, and northward along the north-eastern
Duncan, A. G	Marksville, Ont	boundary line of said province to James bay.  That portion of Ontario lying west and north of Lake Nipissing, the rivers Mattawa and Ottawa and the north-east boundary line of the province to James bay, embracing Nipissing, Algoma, Thunder bay and Rainy river districts, Lake Superior and such portions of Lake Huron and Georgian bay as lie adjacent or opposite to
Young, Wm. S Miller, E. W	Selkirk, Man Qu'Appelle Edmonton	the part of Ontario above described.  Province of Manitoba and the district of Keewatin.  Saskatchewan.  Alberta and district of McKenzie.
McKay, Horace T Sword, C. B Williams, J. T Taylor, E. G.	Dawson City New Westminster Port Essington	Saskatchewan.  Alberta and district of McKenzie.  Yukon district.  Province of British Columbia—No. 1. Southern district.  No. 2. Northern district.  No. 3. Vancouver Id.

## OTHER DEPARTMENTAL OFFICERS.

		Naturalist and Curator of Fisheries Museum, at Ottawa.
Macfarlane, Peter	New Glasgow, N.S	Officer in charge Bait cold storage.
Migneault, R. M. S	Yamaska	Inspector of fishways.
Mackerrow, A. D	Halifax	In charge Intelligence Bureau.
<u>'</u>		

# LIST OF FISHERY OVERSEERS IN THE DOMINION OF CANADA 1908-09.

## NOVA SCOTIA.

Annapolis County.

Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
Fritz, Henry	Port George	Annapolis county.
	An	tigonish County.
McAdam, Alexander	Malignant cove	Antigonish county.
	Сар	e Breton County.
Forbes, A. R LeVatte, Henry. McCuish, John McDonald, Joseph McInnis, Michael R. McLean, John McLean, Murdock. McLeod, Angus. Sullivan, Timothy	North Sydney Louisbourg Scatarie Little Lorraine. Castle Bay. Cabarouse lake Leitches creek Port Morien Little Bras d'Or.	Cape Breton county.
<u> </u>	1	Chester County.
Davidson, J. W	Bass river	Colchester county.
	Cum	berland County.
Angevine, Frank Brownell, Ferguson. Canning, S. Reid, John D. Thompson, Guy.	Middleboro Northport Advocate Hr. Pugwash Oxford.	Cumberland county "
	L	Pigby County.
Bishop, H. R	Digby Meteghan	Municipality of Digby, Digby county. Municipality of Claire,
	Gu	ysboro County.
Reid, David	Guysboro. Port Hilford Guysboro	Guysboro county.
	He	ulifax County,
Gaston, Robt Kennedy, Wm Rowlings, George	Hubbard's cove	Sea coast and inland waters of Halifax county. Halifax county. Sea coast and inland waters of Halifax county.

## List of Fishery Overseers in the Dominion of Canada, &c.—Continued.

## NOVA SCOTIA-Continued.

## Hants County.

,		
Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
McDonald, Chas	Shubenacadie	County of Hants.
	Int	perness County.
		No. 6.—From Big Pond Lobster Factory north, including Cheticamp, Eastern harbour, Little river, Pleasant bay and Paulet cove.
		Inverness coast from Broad cove Chapel to Delany's cove, also East Lake Ainslie and streams, Loch Ban, S. W. Margaree river and tributaries and Margaree river forms for the of Margaree Hr.
Hart, Albert	N. E. Margaree	Coast of Inverness Co., from Delany's cove northward including Big Pond, Eastern Hr., &c., also N.E., Margaree Riv. from Margaree forks to source, and all other streams to Victoria Co. line.
McDonald, Ronald D McIntosh, Geo. P	Broad cove Chapel Pleasant Bay	Inverness County. Coast of Inverness Co. extending from Pleasant bay to Meat cove (inclusive).
		No. 2.—Inverness Co. No. 1.—W. Division coast south of Mabou Hr., including S. W. Mabou river, Port Hood, Judique, Long Pt., Pt. Hastings and Hawkesbury, to N. W. arm River Inhabitants in interior, and north side Victoria Co., from Js. McKinnons to Whycocomagh bay: and through Glencoe and S. W. ridge of Mabou, to Mabou bridge.
		Kings County.
Bishop, Adolphus Eaton, E. B Reid, Reuben F		
	Lu	nenburg County.
Morris, Jno. B Webber, John A	Bridgewater	Lunenburg County.
		Pictou County.
Kitchin, James	. River John	Western Division Pictou Co., comprising coast water from Colchester Co., line to Cole's reef, Pictou Hr and streams flowing into viz., River John and tributaries, Toney river, and Big and Little Cariboo rivers.
McDonald, Alexdr. J Pritchard, A. O	Bailey's Brook New Glasgow	Pictou County.

## List of Fishery Overseers in the Dominion of Canada, &c.—Continued.

## NOVA SCOTIA—Concluded.

Queens County.

	1	And the contract of the contra
Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
Bain, J. LYoung, Chas		Queen's county.
	Rice	hmond County.
Brymer, Arthur  Boyle, Dugald R  Morrison, Atchd	West Arichat	No. 3.—Eastern division that portion of sea coast, lakes and inland waters lying east of St. Peter canal.  Coast and inland waters of Isle Madame including southerly half of waters of Lennox passage.  Richmond County.
	She	lburne County.
Goudey, E. S	Barrington passage Shelburne	From and including Clyde river to Yarmouth Co. line. Shelburne county.
	Ţ.	ictoria County.
	Halifax Baddeck Cape North Neils harbour Wreck cove	St. Paul's island. Victoria county. Cape North, Bay St. Lawrence to county line at Meat cove. Neils harbour including Green cove and New Haven. Englishtown north to Smoky cape at south Ingonish. District Big Bras d'Or north to Englishtown. North and south Ingonish, including Ingonish island. Victoria county.
and the state of t	Ye	ermouth County.
Hatfield, A. M	Arcadia	Yarmouth county.
		BRUNSWICK.  Albert County.
Dowling, C. S	. Alma	County of Albert.
	C	narlotte County.
Billings, Robert  Fraser, W. A  Savage, Charles  Todd, Frank  McNeil, E. A	Woodward's cove, Grand Manan Campobello St. Stephen	Island of Grand Manan, and waters surrounding the same District of Campobello, and the west Isles, Charlotte Co. County of Charlotte.

## LIST of Fishery Overseers in the Dominion of Canada, &c.—Continued.

## NEW BRUNSWICK-Continued.

Gloucester County.

Address.	Extent of Jurisdiction.
BathurstElm TreeInkerman	Gloucester county.
	Kent County.
RichibuctoBuctouche	County of Kent.  Coast line and inland waters at the parishes of Wellington and St. Marie.
North	umberland County.
ChathamBayside	Both shores of Miramichi river from Point Au Quart on south to Oak point on north to junction with N. W. S. W. Miramichi rivers, with all islands therein and streams emptying into.  County of Northumberland.
Q	ueens County.
Gagetown	County of Queens.
Rest	igouche County.
	Baie des Chaleurs, and tributaries from Belledune to Dal- housie. Restigouche river and its tributaries in the counties of Restigouche and Victoria.
Sur	nbury County.
Burton	St. John river from Indiantown, Sunbury county to the county line of York.
St.	John County.
58 Middle street, St John	County of St. John. City of St. John and vicinity.
Vic	toria County.
Grand Falls	County of Victoria. Madawaska district.
	Address.  Bathurst. Elm Tree. Inkerman.  Richibucto. Buctouche.  North  Chatham.  Bayside.  Charlo.  Dalhousie.  Sun  St.  58 Middle street, St John.  I.C.R. stat., St. John  Vice  Grand Falls.

## LIST of Fishery Overseers in the Dominion of Canada, &c.—Continued.

## NEW BRUNSWICK-Concluded.

Westmorland County.

	~	
Name.	P. O. Address.	Extent of Jurisdiction.
Arsenault, Thos. V  Melanson, Ambroise Copp, George E Prescott, Joseph	Pré-d'en-haut Baie-Verte	Coastal and inland waters of parish of Shediac and portion of Botsford parish, North of Big Shemogue Hr., and road from same to near Bristol corner, past Bristol corners and Lowthers to parish at Sackville with jurisdiction in parishes of Moncton and Salisbury.  Parish of Dorchester including Petitodiac river.  Part of Botsford parish, County of Westmorland.  Parishes of Westmorland and Sackville.
	3	York County.
McKay, James D	Fredericton	County of York.
	PRINCE	EDWARD ISLAND.
	1	Kings County.
McCormack, J. A	Souris	County of Kings.
	P	rince County.
Davison, John	Bedeque,	County of Prince.
	Q	rueens County.
Hobkirk, W. C	Charlottetown	Province of Prince Edward Island.
	PROVI	NCE OF QUEBEC.
	G	aspé County.
Veit, Fred	Gaspé Basin	That portion of the province south of the St. Lawrence to and including County of Bellechasse, but specially the counties of Bonaventure and Gaspé.
	Ма	gdalen Island.
	Island	Magdalen islands. That part of Magdalen islands comprising Entry, Amherst and Grindstone islands, also Harbour Basque lagoons. That part of the islands including House Harbour, Grosse Isle, Grand Entry and bays and Byron island.

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## List of Fishery Overseers in the Dominion of Canada, &c. -Continued.

## PROVINCE OF QUEBEC-Concluded.

Saguenay County, North Shore.

Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
Cabot, Geo. E	Fox bay, Anticosti	The Island of Anticosti and adjacent waters.
<b>2,</b>	(Winter address) Levis. (Summer address) Long Pt. Bradore, via Newfoundland	*
Comeau, Nap. A	Godbout	North shore, including Jambons to Tadoussac (Godbout District).
Cormier, Achille	(Winter address) Esquimaux point. (Summer) Romaine via Natashquan.	North shore, from Cape Whittle to Natashquan point (Romaine district).
Joneas, Richard	Natashquan	North shore, including Natashquan to Ste. Geneviève (Natashquan District).
LeBlanc, Eusèbe	Esquimaux point	North shore, including Ste. Geneviève to Pigou (Mingar district).
Le Couvie, John	(Winteraddress)Lob- ster cove, Gaspé. (Summer address) Cr. Commander of Princess.	North shore, from Chicatica to Cape Whittle (St. Augustin District).
Mignault, Theotime	(Winter address) 140 Rue St. François, Quebec. (Summer) Moisie	North shore, including Pigou to Jambons (Moisie district).

The following six names are merely Bounty Officers, exercising no other jurisdiction re fishery matters.

Forest, George	Bonaventure river	Bonaventure county, from Magusha to and including
Chapados, F. X	Gascons	Paspebiac. Bonaventure Co., from Paspebiac to Gaspé Co. Gaspé county, from county line eastward to but not includ-
Carter, A. T.		ing Barachois, Malbaie. Gaspé county, from Barachois, Malbaie, to Fame point,
,	1	both included. Gaspé county, from Fame point to and including Claude
Verreault, Louis		river.
verreauit, Louis	Fetits Mechins	Kimouski county.

## SASKATCHEWAN.

		•
McKay, Henry	Cedar lake	Waters between district of Prince Albert on West and
		Grand rapids on Great Saskatchewan river, Sask.
Headrick; Robt	Prince Albert	District of Prince Albert, Saskatchewan.
Silverthorn, J. W	Lumsden	District of Long lake, Qu'Appelle river, bounded on south
		by base line tp. No. 16, on north by tp. No. 30, on east
		by east side to range 19, and on west by west side of
		range 27, all west of 2nd Meridian.
Climie, W. H	Winninegosis, Man.,	
		F-0

## ALBERTA.

Wood, Ingram Wetaskiwin	Pigeon Lake, etc.
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# List of Fishery Overseers in the Dominion of Canada, &c.—Concluded. BRITISH COLUMBIA.

Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
Galbraith, W. M	toria. Massett Vancouver New Westminster	Queen Charlotte islands. British Columbia.
	J. G. Williams, Insp. Port Essington	Northern District of B. C.

# LIST OF OFFICERS IN CHARGE OF GOVERNMENT FISH HATCHERIES—1908.

Name.	P.O. Address.	Province.		Rank.	
Cunningham, F. H Finlayson, Alexander Walker, John	11	Ontario	Superintendent Inspector, Fish Officer in charge	Hatcheries.	
Armstrong, Wm	Newcastle	11		H	11
Parker, Wm	Sandwich		. 11	11	tt.
McNab, A. J		11	, tr	11	17
Laschinger, A. G	Sarnia	11	. 10	H	
Hurley, J. M	Belleville	11		11	11
Deseve, A. L	Magog	Quebec		11	11
Catellier, L. N	Tadoussae		. 11	11	tt.
Lindsay, Robert	Gaspé basin	11	11	11	1)
	St. Alexis des Mts	17		11	11
Longpré, Joseph	Mont Tremblant.	11		11	11
Belknap, W. G	Baldwin Mills	11		11	11
Mowat, Alexander	Campbellton	New Brunswick		11	12
McCluskey, F. J	Grand Falls	11		11	11
Sheasgreen, Isaac	South Esk	11		11	17
Belyea, J. F	St. John West	11		17	17
Savoy, Sebastien	Shippigan	11			11
LeBlanc, N. S	Cape Bald	11		11	11
Ogden, Alfred		Nova Scotia		11	11
Carmichael, A. G	N.E. Margaree	11	. 11	11	11
Burgess, Frank	Windsor			11	11
McLaren, W. H	Pictou			11	11
Meagher, James	Canso			11	11
Holroyd, A. W.	Winsloe Station	P. E. Island		11	11
Hooker, F. W	Selkirk.	Manitoba		11	11
McPherson, A. J.	Winnipegosis			17	11
Whitwell, Thomas	Lakelse Lake	British Columbia		11	11
Mitchell, D. S	Kualt	11		11	11
Graham, T. W	Lillooet			11	
	Harrison Springs.				11
	New Westminster.			11	11
Bucknall, R. C.	Rivers Inlet		" "	"	Ü
Pretty, A. W	Hazelton			"	1.
Gibbs, H. L	Hazeron		• • !!		81

# LIST OF CANADIAN GOVERNMENT FISHERY CRUISERS AND NUMBER OF CREWS, 1908.

Rear Admiral C. E. Kingsmill, R. N., Ottawa, Commander of Marine Service.

Name of Vessel.	Commanding Officers.	Number of Crew.
Canada *Christine Curlew Constance Petrel Princess Lady of the Lake Vigilant Kestrel Falcon Georgia Alcedo Restless	G. M. May. W. I. Milne A. Macleod W. H. Kent W. Wakeham Alex. Vance P. C. Robinson Holmes Newcombe Alfred Copp Wm. Duncan. F. C. Laird	57 19 19 22 22 25 7 29 20 5 3 5 4
Total officers and men		250

<sup>\*</sup> The Christine is employed in Customs service.

## APPENDIX No. 17

# REPORT RESPECTING THE FISHERIES PROTECTION SERVICE OF CANADA.

To the Superintendent of Fisheries, Ottawa.

SR,—I have the honour to report with respect to the Fisheries Protection Service, as to the number of vessels and men engaged in that service last season (1908) with a brief description of each vessel, the names of the commanding officer and as to where each vessel was employed.

I also append a list of United States vessels calling at Canadian ports, and a list of modus vivendi licenses issued to United States fishing vessels during the fiscal

year 1908-9.

Thirteen cruisers carrying an aggregate of 250 men comprised the Fisheries Protection fleet last season. The vessels' names and the names of the commanding officers were as follows:—

Canada, commanding officer, C. T. Knowlton.
Christine, commanding officer, G. M. May.
Curlew, commanding officer, W. J. Milne.
Constance, commanding officer, A. MacLeod.
Petrel, commanding officer, W. H. Kent.
Princess, commanding officer, Wm. Wakeham.
Lady of the Lake, commanding officer, Alexr. Vance.
Vigilant, commanding officer, P. C. Robinson.
Kestrel, commanding officer, Holmes Newcomb.
Falcon, commanding officer, Alfred Copp.
Georgia, commanding officer, Wm. Duncan.
Alcedo, commanding officer, F. C. Laird.
Restless, commanding officer, Chas. Moore.

## ON THE ATLANTIC COAST.

The Canada was in commission from about the middle of April until November 30, and her cruise was confined principally to the Nova Scotia coast. She is a twinscrew small third-class cruiser, 200 ft. long, 25 ft. beam and 10 ft. 6 in. depth of hold, and has a gross tonnage of 580 tons. Her speed is 17 knots an hour. She is armed with four 1½-pound quick firing automatic mark 3,1904, guns; two forward and two aft. She is electrically lighted throughout and fitted with a powerful searchlight. The Canada carries a crew of 58 officers and men all told. She was built by Vikers Sons and Maxim, England, in 1904.

The *Christine* went into commission as a cruiser about the first of August, and though employed in fisheries work she is entirely controlled by the Department of Customs so far as her movements are concerned. She is an iron screw steamer 126 ft. long. 27 ft. 2 in. wide, 9 ft. 9 in. depth of hold and has a gross tonnage of 140 tons. Her speed is 10 knots an hour, and she carries a crew of 20 officers and men all told. She was built at Port Glasgow, G.B., in 1881. The *Christine* was purchased by this department in July, 1908, and transferred to the Department of Customs.

The Curlew went into commission about May 28, and was employed principally in the Bay of Fundy and along the southwestern coast of Nova Scotia. She was assisted

in her work during the season by Patrol Boat No. 2 in charge of the fishery overseer of that district. The *Curlew* is a twin-screw iron steamer 116 ft. long, 19 ft. 8 in. wide, 11 ft. 3 in. deep, and has a gross tonnage of 158 tons. Her speed is 10 knots an hour and she carries a crew of 20 officers and men, all told. She was built at Owen Sound. Ont., in 1892.

The Constance was employed principally patrolling along the coast of Nova Scotia. She is a twin-screw iron steamer 116 ft. long, 19 ft. 8 in. wide, 11 ft. 2 in. depth of hold and has a gross tonnage of 185 tons. Her speed is 10 knots an hour. She carries a crew of 23 officers and men all told. She was built at Owen Sound, Ont., in 1891. Prior to August, 1908, the Constance was under the control of the Department of Customs so far as her movements were concerned; subsequently she was transferred to

this department.

The *Petrel* went into commission on May 14, and was employed along the north-eastern coast of Nova Scotia, including Cape Breton, until June 14, when she was transferred to the coast of Prince Edward Island, where she continued her cruise until October 1, when she returned to Nova Scotia and cruised in the vicinity of Halifax and Sable Island until the close of the fishing season. The *Petrel* was assisted in her work by Patrol Boat No. 1. The *Petrel* is a steel screw steamer 116 ft. long, 22 ft. beam, 10 ft. 3in. depth of hold and has a gross tonnage of 192 tons. Her speed is 10 knots an hour and she carries a crew of 23 officers and men all told. She was built at Owen Sound, Ont., in 1892.

The *Princess* went into commission on May 14, and cruised in the Gulf of St. Lawrence during the fishing season. She is a steel screw steamer 165 ft. long, 26 ft. beam, 10 ft. 3 in. depth of hold and has a gross tonnage of 192 tons. Her speed is 10 knots an hour, and she carries a crew of 26 officers and men all told. The *Princess* 

was built at Grangemouth, Scotland, in 1896.

## ON'THE GREAT LAKES.

The Lady of the Lake is employed on Lake Winnipeg during the fishing season. She is a wooden screw steamer 105 ft. long, 18 ft. 5 in. wide, 8 ft. 9 in. depth of hold, and has a gross tonnage of 201 tons. She carries a crew of 8 officers and men all told.

The Lady of the Lake was built at Selkirk, Man., in 1897.

The Vigilant went into commission on April 15, and was employed in the protection of the fisheries on the Great Lakes. She is a steel twin-screw steamer small third-class cruiser 175 ft. long, 22 ft. beam, 10 ft. depth of hold. She is electrically lighted throughout and fitted with a powerful searchlight. She carries the same guns and small arms as the Canada, and has a speed of 14 knots an hour. She carries a crew of 30 officers and men all told. The Vigilant was built by the Polson Iron Works Company, Toronto, in 1904. On September 1 Captain P. C. Robinson replaced Captain E. Dunn as commander of the Vigilant.

## ON THE PACIFIC COAST.

The Kestrel is employed in the protection of the fisheries on the Pacific coast, and is in commission the year round. She is assisted in her work by the smaller cruisers Falcon, Georgia, Alcedo and Restless, the Georgia being employed principally on the Fraser river. The Kestrel is a wooden screw steamer 126 ft. long, 24 ft. beam, 12 ft. 2 in. depth of hold and has a gross tonnage of 311 tons. Her speed is 10 knots an hour. She was built at Vancouver, B.C., in 1903.

During the season I personally inspected the larger cruisers, my report in regard

to which was duly laid before the Deputy Minister.

I am, sir,
Your obedient servant,
C. E. KINGSMILL,
Officer Commanding the Marine Service of Canada.

List of United States Fishing Vessels to which Licenses were issued under the Act intituled 'An Act respecting Fishing Vessels of the United States of America, during the Fiscal Year ended March 31, 1909.

Vessel.	Port of Registry.	Tonnage.	Port of Issue.	Amount.
				\$ cts.
Viola	Beverly, Me	14	Yarmouth, N.S.	* 21 00
Maxime Elliot. Quickstep	Gloucester, Mass. Boston, Mass.	75	Shelburne N S	112 50
Marjie Turner	Portland, Me.	44	Varmouth N S	112 50
Elector	Gloucester, Mass	84	Pubnico, N.S.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Indigin. Nickerson.	Southwest	89 23	Pubnico, N.S. Shelburne, N.S.	133 50
Ella M. Goodwin	Gloucester, Mass	86	Yarmouth, N.S. Sand Point, N.S.	$\begin{array}{c} 34 \ 50 \\ 129 \ 00 \end{array}$
J. W. Parker Lusan and Mary	Boston, Mass	96	11	144 00
Tattler.	Gloucester, Mass	83 135	Halifax, N.S.	124 50
Lizzie Maud	vinal Haven	48	Lockeport, N.S. Yarmouth, N.S.	202 50 72 00
Senator	Gloucester, Mass	74	Ft. Millgrave, N.S.	111 00
Margaret Yakima	11	79 71	Canso, N.S	- 118 50
Cavalier	11	96	Port Hawkesbury, N.S	106 50 144 00
Richard		90	11 11	135 00
Georgiana	Boston, Mass.	85 87	Lockeport, N.S.	127 50
Harvard Waldo. L. Stream.	Gloucester, Mass	76	Pubnico, N.S. Liverpool, N.S.	130 50 114 00
Arbutus	H	81	FOR Hawkeshury, N.S.	121 50
Selma	Boston, "Mass.	86 87	Liverpool, N.S	129 00
Vera	Gloucester, Mass	77	Port Hawkesbury, N.S	130 50 $115 50$
Dictator Cath. Burke.	Poston Man	92	Canso, N.S.	138 00
Mystery	Boston, Mass. Plymouth, Me.	$\begin{array}{c} 92 \\ 78 \end{array}$	11	138 00
Gossip	Gloucester, Mass	91	11	$117 00 \\ 136 50$
John Hays Hammond	н	92	Port Hawkesbury, N.S.	138 00
Arcadia		71 90	House Hbr., Mag. Is	106 62
Moornam.	Boston, Mass	82	Pubnico, N.S.	135 21 123 00
Thos. S. Gorton.	Gloucester, Mass	86	Canso, N.S. Arichat, N.S. Yarmouth, N.S.	129 00
Dora A. Lawdon	tt	92 93	Varmouth NS	138 00
Valkyrie	11	104	Shelburne, N.S.	139 50 156 00
Onata Jas. R. Clark	Boston, Mass. Beverly, Me	105	Shelburne, N.S North Sydney, N.S Yarmouth, N.S	157 50
Preceptor	Gloucester, Mass	89	White Haven, N.S	64 50
Gladiator Titania		75	Canso, N.S.	$133 50 \\ 112 50$
Atalanta		6.6	Shelburne, N.S.	115 50
Mooween	Duxburg	75 83	Canso, N.S. Arichat, N.S.	$112 50 \\ 124 50$
vas. A. Garneid	Crioncester, Wass	50	Port Hawkesbury, N.S	75 00
Mary Edith	Gloucester Mass	51 80	Liverpool, N.S. Tusket Village.	76 50
rannie A. Smith	11	87	Amberst, Mag Is	120 00 131 37
Jennie B, Hodgden	11	85	Amherst, Mag. Is. Yarmouth, N.S.	127 50
Elizabeth NAgnes	Bucksport	100	ot. reters, P. E. I.	153 00
raracon :		75 80	North Head, N.B. St. John, N.B.	112 50 120 00
Lillian	Boston, Mass	95	North Sydney	143 50
N. U. Ivunan	Cape Porpoise	43	Liverpool, N.S	64 50
T. M. Nicholson	Gloucester, Mass	$\begin{bmatrix} 85 \\ 90 \end{bmatrix}$	Shelburne, N.S. Arichat, N.S.	127 50
Metamora	Boston Mass	81	Canso, N.S.	$135 00 \\ 121 50$
Patriot	Aloucester, Mass	58	Canso, N.S. Lunenburg, N.S.	87 00
riadys and Sapra	Severiv. Mass	10 1	Liver poor, IV.D	64 50
$\Gamma$ eazer (	floucester Mass	61 8	Shelburne, N.S.	75 00 91 50
Suzan and Mary I	Soston, Mass	85	Sand Point, N.S. Louisburg, N.S. Halifax, N.S.	124 50
TOWNESTI DOG	Floucester, Mass	74 ]	Louisburg, N.S.	111 00
Waldo L. Stream	11	81 1	Halifay N S	121 50

List of United States Vessels to which Licenses were issued, &c.—Concluded.

Vessels.	Port 'of Registry.	Tonnage.	Port of Issue.	Amount.
James R. Clark. Smuggler. Hazel R. Hines. Theodore Roosevelt. Senator Gardner. Viola J. R. Bradley. Arkona. Mabel D. Hines. Athlete Orinoco. Bohemia Blanche. Effie M. Morrissey. J. J. Flaherty Claudia. Tattler Anne M. Parker. Maxime Elliot.	Beverly, Mass Gloucester, Mass	43 91 79 90 94 14 80 97 92 96 88 86 78 83 124 79 205 206 75	Yarmouth, N.S. Lockeport, N.S. Pubnico, N.S.  Yarmouth, N.S.  Tusket Wedge, N.S. Liverpool, N.S.  Tusket, N.S.  "" Digby, N.S. Tusket Wedge, N.S. Liverpool, N.S. Liverpool, N.S. Liverpool, N.S. Liverpool, N.S. Shelburne, N.S. Lockeport, N.S.	\$ cts.  64 50 136 50 138 50 138 50 138 50 138 00 141 00 21 00 120 00 145 50 138 00 132 00 129 00 117 00 124 50 186 00 118 50 202 50 150 00 112 50

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LIST of United States Fishing Vessels which have entered Canadian Ports during the Year 1908, with Net Tonnage, Crew and Number of times each Vessel entered the Various Ports. Total Entries Yarmouth. Woods Harbour. Whitehead. Westport. Tiverton. Souris. Shelburne. Shag Harbour. St. John. Pubnico, Port Hood. North Sydney. North Head. Mulgrave. Magdalen Islands. Lunenburg. :07 Louisburg. :-0 Liverpool. Liscomb. Lepreaux. ATLANTIC PORTS Hawkesbury. Georgetown. Digby. Barrington. Arichat. Number of men. 92 28 28 28 Tonnage. Name of Vessel, Arthur Binney.... Agnes O Aggie B. Watson
1 A. E. Whyland
B. Bohemia
B. A. Smith
Blanch
Boyd & Leeds Catherine Burke.... Aspinet ..... Alice R. Lawson... A. M. Nicholson Arcadia. Annie M. Parker Arbutus..... Aethusa...Arthur D. Story Admiral Dewey Alamedia. Atlanta Number.  $-23\frac{1}{2}$ 

List of United States Fishing Vessels which have entered Canadian Ports during the Year 1908, with Net Tonnage, Crew and Number of times each Vessels entered the Various Ports—Continued.

ATLANTIC PORTS-Continued.

	9-10 EDWARD VII., A. 1910
Total Entries.	
Yarmouth.	
Woods Harbour.	, and the second
Whitehead.	
Westport.	
Tiverton.	
Shelburne.	
Snag Harbor.	
St. John.	
Pubnico.	1:::::::::::::::::::::::::::::::::::::
Port Hood.	
North Sydney.	- : : : : : : : : : : : : : : : : : : :
North Head.	
Magdalen Islands.	
Lunenburg.	
Louisburg	: - : - : - : - : - : - : - : - : - : -
Liverpool.	
Liscomb.	
Lepreaux.	
Hawkesbury.	
Halifax.	
Digby,	- · · · · · · · · · · · · · · · · · · ·
Clark's Harbor.	Title: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1:
Canso.	
Barrington.	
Arichat.	- 818884771
Number of men.	
'l'onnage.	055 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Name of vessel.	22 Clara G. Sylva  33 Colonial  36 Colonial  36 Corona  37 Catherine & Ella  38 Corsican  39 Centemnial  40 Diana A. Lawson  41 Dora A. Lawson  42 Elmir E. Gray  43 Ethia Mildred  44 Elmir E. Gray  45 Ethia Mildred  46 Elizabeth Silsbee  46 Elizabeth Silsbee  47 Elian Midred  48 Esparanto  48 Esparanto  49 Emily Cooney  40 Emily Cooney  40 Emily Cooney  41 Esparanto  42 Elizabeth Silsbee  44 Elian Morrissey  45 Elian Morrissey  46 Elizabeth Shah  47 Elian Morrissey  48 Esparanto  48 Esparanto  49 Emily Cooney  40 Emily Cooney  40 Emily Cooney  41 Elian Morrissey  42 Ellen C. Burke  43 Elsten  44 Estie M. Morrissey  45 Ellen C. Burke  46 Elsten  47 Estie M. Soodwun  48 Esparanto  48 Esparanto  49 Emily Cooney  40 Esparanto  40 Esparanto  41 Ellen C. Burke  42 Ellen C. Burke  43 Esparanto  44 Estie M. Morrissey  45 Ellen C. Burke  46 Elsten Morrissey  47 Ellen C. Burke  48 Esparanto  48 Esparanto  49 Entie M. Soodwun  40 Esparanto  40 Esparanto  41 Ellen C. Burke  42 Ellen C. Burke  43 Esparanto  44 Esparanto  45 Ellen C. Burke  46 Ellen C. Burke  47 Ellen C. Burke  48 Esparanto  48 Esparanto  49 Entie M. Soodwun  40 Esparanto  40 Esparanto  41 Ellen C. Burke  42 Ellen C. Burke  43 Esparanto  44 Esparanto  45 Ellen C. Burke  46 Ellen C. Burke  47 Ellen C. Burke  48 Esparanto  48 Esparanto  49 Entie M. Soodwun  40 Esparanto  40 Esparanto  41 Esparanto  42 Ellen C. Burke  43 Esparanto  44 Esparanto  45 Esparanto  46 Ellen C. Burke  47 Esparanto  48 Esp
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is y W.  I law b.
65 Fannie B. Atwood 66 Francis Whalen 68 Francis J. O'Hara. 68 Francis J. O'Hara. 68 Francis J. O'Hara. 69 Fish Hawk. 70 Gadiator. 71 Geo. Campbell 72 Gossip. 74 Georgiana. 75 Grace Darling. 74 Georgiana. 75 Grace Darling. 76 Gertude. 76 G. R. Bradly 80 Good Luck. 81 Grace G. 82 Grace Ottis. 83 Hazel R. Hines. 84 Harvard. 85 Harvard. 86 Hartie M. Graham. 87 Hiram Lowell. 88 Hartie M. Hickman. 89 Hartie M. Hickman. 89 Hartie M. Hickman. 89 Hartie M. Graham. 87 Hiram Lowell. 88 Hartie M. Graham. 87 Hiram Lowell. 89 Hartie M. Hickman. 89 Hartie M. Hickman. 80 Independence. 80 Independence. 81 Grace G. 82 Grace Ottis. 83 Harely. 84 Harvard. 85 Hartie M. Hickman. 86 Hartie M. Hickman. 87 Hiram Lowell. 88 Hartie M. Hickman. 89 Hartie M. Graham. 87 Harnony. 89 J. Flaherty. 90 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. R. Bradly. 91 J. L. Bradly. 91 J. L. Bradly. 92 J. R. Bradly. 93 James and Bather. 94 J. Modylue. 95 J. L. Howell. 96 Jenna and Maud. 97 Lucania. 98 Jennes and Maud. 99 Lizizie M. Stanley. 91 Lizizie M. Stanley. 91 Lizizie M. Stanley. 91 Lizizie M. Stanley. 91 Lizizie M. Stanley. 91 Lizizie M. Stanley. 91 Lizizie M. Stanley. 91 Lizizie M. Stanley.

List of United States Fishing Vessels which have entered Canadian Ports during the Year 1908, with Net Tonnage, Crew and Number of times each Vessel entered the Various Ports—Continued.

ATLANTIC PORTS-Continued.

	9-10 EDWARD VII., A. 1910 • • • • • • • • • • • • • • • • • • •		
Total Entries.			
Lot ntr			
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Yarmouth.			
Woods Harbour.			
Whitehead.			
Westport.			
Tiverton.			
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Shelburne.	14 14 10 14 CHE 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Shag Harbour.			
St. John.			
Pubnico.	:: N ::::: N :::::::::::::::::::::::::		
Port Hood.			
North Sydney.	ц : : : : : : : : : : : : : : : : : : :		
North Head.			
Mulgrave.			
abnafal nafabyaM			
Lunenburg.			
Louisburg.	[H ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]		
Liverpool.	3000HH4 10HH00H00H000		
Liscomb.	mm ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;		
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Hawkesbury.			
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Georgetown.			
Digby.			
Clark's Harbour.			
Canso.	940 : Hww idhum : : : : : : : : : : : : : : : : : : :		
Barrington.			
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	222122128212821282128212821282128212821		
Men.			
Tonnage.	88888888888888888888888888888888888888		
Name of Vessel.	15   Matawora.   16   Midred Robinson   17   Mooanam   18   Moonam   18   Moonam   19   Mooanam   19   Moooanam	Number.	1115 1115 1115 1115 1115 1115 1115 111

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Niagara		2 00	: :	: :	: :		:	:	:	:	:	:	:
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Oliver T. Killam.		:	:	<del>-</del>	:	:	:	:	:		:	:	:
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Pauline		:	:	: -	:			:	:	:	:	:	
Parthenia			:		:	:		:	:	٠. 	:	:	•
Priscilla Smith		:		:	:			:	:	:	:	:	
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Quannapowitt		:		:	-	:			*	:	:	:	_
Robert and Arthur		:	:	:	:		:	:		:	:	:	
Rob Rov		:		:	4	: "	:	:		:		:	
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Ralph E. Hall		:		: "	:	: 0	:	:		:	:	:	
Romance		:	:		:		:	:	:	-		:	
Richard		:		: 	:		:	:		:	:	:	•
Raymah		•			:	:	:	:	:	:	:	:	
Regina				:	:		:	:		:	:	:	
Ramona					:		:	:		:	:	:	- (
Ralph Russell			:	:	:		:	:	:	:	:	:	21.
Rebecca			. ,	:	:		:	:	:	:	:	:	4
Robert and Edwin.			-				:	:	:	:	:	:	•
Rose Standish							:	: -		:	:	:	· G
Slade Gorton				2		-	:	:	:	:	:		7
Susan and Mary				1		1			:	:	:	:	
Senator Gardener		-		:	:	-		2		:	:	: 6	
Saladin			:			-	: :	:	:	:	:	:	7
Senator Salisbury.		:						: :		:	: :	:	
S. P. Willard			:					1		:	:	:	7
Speculator			:		:					:	:	:	_
Squanto			:	:	:	-		2		:	:	: :	.,
Selma			:	:	:	:	:	:				4	-
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List of United States Fishing Vessels which have entered Canadian Ports during the Year 1905, with Net Tonnage, Crew and Number of times each Vessel entered the Various Ports—Concluded.

ATLANTIC PORTS—Concluded.

	9-10 EDWARD VII., A. 1910
Total Entries.	
Yarmouth.	88
Woods Harbour.	
Whitehead.	
Westport.	
Tiverton.	
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Shelburne.	
Shag Harbour.	
St. John.	
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Port Hood.	::::::::::::::::::::::::::::::::::::::
North Sydney.	
North Head.	
Mulgrave.	
Lunenburg.	- · · · · · · · · · · · · · · · · · · ·
Louisburg.	
Liverpool.	
Liscomb.	——————————————————————————————————————
Lepreaux.	
Hawkesbury.	
Halifax.	- : - : : : : : : : - : - : : : : : : :
Georgetown.	
Digby.	
Clark's Harbour.	
Canso.	
Barrington.	
Arichat.	::=:::::::::::::::::::::::::::::::::::
Men.	282838383888355858888388888888888888888
Tonnage.	8128188747586887488857448468873878878888888888888888888888888
Name of Vessel,	198 Thomas A. Cromwell   199 Tacona   199
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## PACIFIC PORTS.

Number.	Name of Vessel.	Ton-nage.	Number of men.	Vancouver.	Victoria.	Nanaimo.	Union.	Alert Bay.	Quatsino.	Prince Rupert.	Port Simpson.	Total Entries.
1	King Fisher	141	36	27		29						54
2	Manhatten	134	37	29		29				. 1		59
3	New England	71	36	28		28		K-0 & 1				56
4	Chas. Levi Woodbay	66	23	1		3		2				6
5	North Land	35	14					1	1			2
6	Zapora	196	38			12		2		1		15
7	Chicago	129	42			10						10
8	Edith	78	33			1		-,= +			• • •	1
9	San Juan	128	35			7		- 4 4 0				7
10	Thistle	56	25			8						8
11	Grant	180	38			4						· 4
12	Ida May	42	13			2						2
13	Selma	19	07			1						1
	Totals	1,275	377	85		132		5	1	2		225

# APPENDIX No. 18

STATEMENT showing the number of prosecutions, &c., for offences against the Fisheries Act during the fiscal year 1908-09.

. Remarks,		50 The whole fine in one case (\$10) and half the fines in each of the others, paid to credit of Receiver General.  Five cases not proven, and dismissed.	266 00 Proceeds of sale of confiscated fish and half the fines paid to credit of Receiver General.	75 20 Half of fines paid to complainant, the balance, and proceeds of sale of confiscated fish paid to credit of Recei-	ver General.	42 50 Half of fines paid to complainants and half to credit of Receiver General.	25 00 Half of fines paid to complainants and half to credit of Receiver General.	In five cases no fines were imposed.	In the tweive cases of illegal cyster fishing a fine of \$1 each was imposed, half of which was paid to complainants. A fine of \$20 was imposed in each case of illegal quahaug fishing, and allowed to stand during good behaviour of defendants. The others were dismissed
Amount credi- ted to Receiv'r General.	ets	32 50				42 50	25 00		•
Sale of confis-cated fish.	ets.	•	21 00	55 20			0 0 0 0 0		
Amount of penalty.	e cts.	55 00	532 00	40 00		00 CS	50.00	. 19 00	
Nature of Offence,		Six cases of contravention of lobster law, two cases of illegal salmon fishing, one case of illegal smelt fishing	Illegal fishing	Two cases of illegal herring fishing, and one case of illegal trout fishing.	Four cases of illegal salmon fishing, and one	Five cases of fishing without license, and five	cases of illegal salmon fishing	Twelve cases of fishing oysters illegally, seven cases of fishing quahaugs illegally, two cases of fishing smelbs illegally, and one cases of fishing lobsters illegally	
Number of prosecu- tion.		o	19	n	70	10		25	
Locality.	Nova Scotia	District No. 2.	" No. 3	District No. 1	" No. 2	" No. 3		Prince Edward Island	

STATEMENT showing the number af prosecutions, &c., for offences against the Fisheries Act during the fiscal year 1908-09-Continued.

* Remarks,		35 00 Half of fines paid to complainants and half paid to credit	Of Peccival Constant	142 22 The fish were taken possession of by the inspector, while in transit to market, and whole proceeds remitted to Receiver General.	50 Half of fines paid to complainants. Two cases of fishing without license were dismissed.	9 75 Half of fines paid to complainants and half to credit of Receiver General.	327 90 Half of fines paid to complainants; proceeds of sale of confiscated fish and balance of fines paid to credit of Receiver General.	490 00 Half of fines paid to complainants, and half to credit of Receiver General.	258 00 Half of fines paid to complainants. A fine of \$75, was imposed in the case of using a purse seine in Nanaimo Harbour.  Japanese were the chief offenders in this district.	
Amount oredited to Receiv'r General.	sto ets.	35 00	300 00		37 50	9 75		490 00	258 00	196 32 2,041 51
Sale of confis-cated fish.	e cts.			92 22			27 90			
Amount of penalty.	cts.	00 02	300 00	20 00	75 00	19 50	00 009	00 086	516 00	3,384 50
Nature of Offence.		Four cases of illegal fishing, one case of allowing sawdust to pass into water	Fishing during close season	Fishing during close season	Eight cases of fishing during close season, four cases of fishing without license, and two cases of using illegal netting	Two cases of illegal fishing, and one case of dealing in illegally caught fish	Thirty one cases of fishing in close season, sixteen cases of obstructing channel, five cases of fishing without license, and one case of using illegal netting	Illegal fishing	Fourteen cases of fishing in close season, seven cases of obstructing fish passage, one case of using purse seine illegally, and one case of fishing without license.	
Number of prosecu- tion.		70	9	-	14	ಣ	29	33	8	209
Locality.		Quebec-	Ontario	Manitoba—	Saskatchewan—	Alberta— British Columbia—	District No. 1.	No. 2	, No. 3	Totals

## APPENDIX No. 19

## REPORT ON HERRING AND HERRING CURING.

By J. J. Cowie.

To the Superintendent of Fisheries, Ottawa.

Sir,—The minister having decided that it was not necessary to further employ drifter *Thirty Three* and the staff of Scotch herring workers, as, in his opinion, enough had already been done to demonstrate to fishermen and others the advisability of adopting the method known as 'deep-sea drifting' for herring, the use of an improved barrel, and a new style of curing, and, further, having decided that instead, my services should be continued to the department during the 1908 season, for the purpose of giving the necessary information, and advice, as to the curing and marketing of the fish, to any fishermen and fish-curing firms who wished to practise the new way of fishing and curing.

Such decisions having been conveyed to me in a departmental letter dated January 4, 1908, I, in accordance therewith, left Scotland for Canada, in the beginning of May last, and endeavoured to carry out the instructions of the department by visiting the most likely places on the Atlantic coast and placing my services at the disposal of those desirous of taking advantage of them; and now beg to submit my report in that connection, as well as my observations of the fisheries, in general, during the season just finished.

The herring districts visited by me in the course of the season were, the Island of Grand Manan, in the Bay of Fundy, the Caraquet shore, on the north coast of New

Brunswick, and the coast of Gaspe which borders on the Bay Chaleur.

#### GRAND MANAN.

The herring fishery of Grand Manan is of considerable extent. It is, as a matter

of fact, the staple fishery, and industry of the island.

Beginning, as it does, about the middle of July and continuing, more or less plentifully, till November and sometimes even into December, it furnishes employment to a large proportion of the male population of the island in the actual catching of the fish.

The greatest bulk of the herring taken here is immediately brought to the curing

houses on shore and salted down in tanks for the purpose of being smoked.

When the fish have been long enough in salt they are hung on short sticks and placed in the smoke-houses and submitted to the process of smoking until they have become quite yellow and hard. The stringing of the fish for this purpose gives employment to a considerable number of female workers, who, at the rate of 25 cents an hour, earn a goodly sum of money in the course of a successful season.

After the process of smoking has been thoroughly completed, the fish are packed in small boxes and sent, chiefly, to the West India markets. The price per box, filled,

runs from 50 to 60 cents.

A barrel of fresh herring turns out about seven boxes of smoked fish.

The mode of fishing generally carried on by Grand Manan fishermen is that known as 'wier fishing.'

Net fishing is also carried on, however, chiefly at places where 'wiers,' owing to the condition of the bottom, and the exposed nature of the coast, cannot be built.

The 'wiers' capture fish of all sizes, but by far the greater proportion consists of medium and small fish, the latter, sardine size, the former being smoked and the latter used largely for lobster bait.

The net fishermen, on the other hand, by the use of a wide-meshed net, capture only fish of a large size, which are nearly all split, cured in pickle, packed in barrels, and marketed, chiefly in St. John. The price does not fluctuate much, if any, and is generally about \$4 for barrels, and \$2 for half-barrels.

My visit to the island covered the month of July and part of August.

During that time the fishery was making rather slow progress, especially the wier fishery.

All through the month of July herring were extremely scarce around the island, but from the beginning of August to about the 10th of that month, net fishermen began to secure considerable quantities of large herring near 'Southern Head,' and curing became quite general, especially at the village of Seal Cove.

Of the four fishing villages on the island Seal Cove seems to be the most important. It was at this village, only, where I found an earnest effort to attempt curing in the Scotch style, and a desire to profit by my presence on the island.

As a result of the visit of the Scotch curing staff to Grand Manan towards the close of the 1907 season, and the demonstration then given of the curing process, in strong, well-made barrels, I found, on visiting the island this year, that at least one fish-curing firm at Seal Cove had taken the lesson to heart, and as a consequence, during the spring of this year, laid in a supply of barrels well-made, and hooped with iron hoops on the ends, in the approved Scotch fashion.

The cost of these would be from 25 to 30 cents more than the old slim barrels, but the firm was satisfied that ultimately it would be more than repaid, for the extra outlay, by the increased price, and demand created amongst consumers for fish cured in barrels that could be guaranteed to retain the pickle during transportation, and keep the fish in thoroughly sound condition throughout the period of consumption.

Before I left the island this firm had filled about 300 barrels; not all in the Scotch way of curing, however,

The large sized fish were being split and cured in the old way, but with this great difference that the fish were packed in good barrels, and with greater care than had ever been exercised hitherto. These were for consumption in home markets entirely.

The medium sized fish—which are the most suitable class for the purpose—were being cured in the Scotch style for consumption in both United States and home markets.

Although the firm of McLaughlin Bros. is the only one, so far, in Grand Manan, that has had enterprise enough to take advantage of the visit of the staff last year, and of my presence this year, I am fully convinced that, with the merited encouragement this firm is sure to receive from its customers, it will continue along the improved lines, and, further, that others on the island will as surely follow its good example, however slowly.

I left Grand Manan in the Middle of August and proceeded to Caraquet.

## CARAQUET.

The fall herring fishery of Caraquet, and the neighbouring villages of Shippigan and Miscou, is carried on almost entirely on the small inshore banks that lie between Caraquet harbour and Miscou, and is of some importance owing to the fine quality of the fish which frequent this part of the coast, although, owing to various causes, it does not approach to anything like what it might and ought to be.

The fishery begins, generally, about the middle of August, and continues till about the middle of September.

The method of fishing in vogue is that of anchored nets.

As the time approaches when herring are expected to seek the spawning banks, the fleet of boats, sometimes numbering as many as 60, proceeds to sea and comes to anchor on one or other of the aforementioned banks. Each vessel carries from two to four nets, and the procedure is to set or anchor these nets in the shallow water and allow them to remain so long as the vessel is on the bank. At intervals during the night, two men, in a dory, overhaul the nets and pick out what herring have become fixed in the meshes since the previous overhauling.

Curing is carried out on the vessel so long as the night's catch is not a large one, but in the event of the take being greater than can be conveniently cured on board, the vessel makes speed for the harbour, where help is acquired and the curing pro-

ceeded with at the shore.

This style of fishing accounts for the shortness of the herring season at Caraquet. By anchoring their nets, and confining themselves to the banks, the fishermen only begin to get herring towards the end of August when the fish are seeking the shallow waters to spawn. By the second week in September spawning is all over and the fish have disappeared into deeper water again.

During the summer of 1906, the drifter Thirty Three, fully demonstrated the fact at Caraquet that by the style of fishing called 'drifting,' fish of the best quality could be caught in the deep water not only weeks before the general movement of fish towards the banks, but for weeks after the spawning fish had deserted those spawning

resorts.

As a corroborative to this I may point out that I found during my stay in Caraquet this year, that some of the boats from the island of Miscou had adopted the method of drifting with from four to six nets, just outside the banks, and while the fleet, generally, was waiting idly for the fish to move on to the spawning grounds, those boats, with their drift nets, were picking up a considerable amount of herring, and at the end of the season had the best record of any in the district.

In course of time, I have no doubt, drift-net fishing will become the general thing

amongst the fishing fleet of Caraquet.

I cannot yet say so much, however, for the result of our example and teaching in regard to curing the fish. Convincing, fishermen, especially, of the benefits of a change from their old fixed methods and ideas is quite a hard task indeed.

The fishing at and around Caraquet, during the season of 1908 was little better

than a failure.

The total catch would possibly no more than supply the local demand in the county of Gloucester, N.B. Owing to the poor fishing, curing took place mostly at sea, consequently one party only in Caraquet sought my services in the actual work of curing, this year, on shore. His barrels, however, were of the old slim make and could be made tight only with the greatest difficulty.

Two years ago, when in Caraquet, I went to a sawmill, had staves cut to the proper size and thickness, got a local cooper initiated into the making of barrels such as are in use in the Scotch trade, which barrels were used by Caraquet curers with marked advantage, even in their local markets, and now I find that they have relapsed to the state of using the old poorly made package, with the result that the usual crop of complaints, of loss of pickle, and rusty fish continues to come in from the con-

This state of things continues, I suppose, owing to the cheapness of the poor package in the first instance, and the disinclination of fishermen, of their own accord, to pay more for the better barrel. It is possible, however, that their eyes will be opened bye and bye to the stupidity of such tactics.

Leaving Caraquet on September 18, I proceeded to Campbellton, N.B., and from

that point set out to visit the Gaspé coast.

## GASPÉ COAST.

Although fishing of various kinds is carried on to a greater or less extent at all the villages on this coast, nothing of much importance is done in the upper reaches of the Bay Chaleur i.e., above the village of Paspebiac, in the county of Bonaventure.

From Paspebiac down the bay to Gaspé basin is a continuous string of villages.

each with its little fleet of fishing boats.

The fishermen of those villages, without exception, devote all their time during summer and autumn to cod-fishing, and do not attempt to catch more herring-and those of a small class, by the use of small meshed nets-than enough to supply their

immediate needs for baiting their cod lines.

Last year drifter Thirty-Three plainly showed that large quantities of fine herring could be taken during the summer off this coast, but I am quite within the mark in saying that local fishermen have not taken enough for their private use, as food, this year, let alone any to cure for export. Indeed, I frequently heard local families talk of getting their winter supply of salted herring from Nova Scotia. Consequently, no attempt whatever has been made, along the whole stretch of the coast on the north side of the Bay Chaleur, to cure herring during the past summer.

In any case, if they had got the fish, I failed to see what they could have done

with them.

I did not see a barrel, in the course of my travels along that shore, that would have decently kept in sand, to say nothing of pickle, and the most annoying thing about this state of affairs is that on every hand the need of a superior barrel and the advantages which accrue from its use are admitted fully and freely.

As a result of my journeyings round the shores of Canada in connection with the effort to effect an improvement in the herring industry, I have been forced to the conclusion that the barrel question is the chief root of the evil that keeps the trade,

even yet, from making the progress it should do.

This evil is not, by any means, confined to any one district, or part of the coast,

British Columbia excluded.

Some districts do certainly produce a rather better barrel than others, but the very best at present in use anywhere provides a miserable spectacle to any one possessed with a practical eye.

I, or any one else, may continue planting the seeds of improvement by teaching fishermen and curers to change their style of herring curing, but the crop of results, I fear, will amount to nothing worthy of the efforts put forth unless something be done to save the fisherman from himself and his own blindness, by bringing pressure to bear on him to use the proper sort of package for marketing his fish in.

The same evil prevails almost to an equal degree in that more important branch

of the pickled fish industry, the salt mackerel business.

It is an admitted fact that salt mackerel from Norway and Ireland sell at much higher prices in the United States than those from Canada, and the reason is not that the Irish and Norwegian fish are of any better quality, for the fall mackerel of Canada are at least equal to mackerel caught in any part of the world, either in fatness, flavour, or appearance in the fresh state.

The reason is to be found rather, partly in the greater care exercised abroad in cleaning and salting the fish, and chiefly in the use of a superior barrel in both

Norway and Ireland for conveying the fish to market in a sound condition. The need of a perfectly tight strong barrel in the mackerel trade is, if anything,

more of a necessity than in the herring trade.

If a barrel of salt mackerel once loses its pickle the fish more rapidly become discoloured than in the case of herring, and the least discolouration, as is known, affects the price considerably.

The barrel used for salt mackerel in Canada is a little better than that in use for

herring, but it is much inferior to the Scotch herring barrel.

Signs are not wanting, however, that both in the herring and mackerel trades, the need for better packages is being recognized by individuals here and there on the coast.

At Grand Manan, the Messrs. McLaughlin have shown a splendid lead in the purchasing of strong iron-hooped barrels, at an increased cost, for their herring packing, and when I was in Halifax last month the head of that large fishery concern, the Robin Collas Company, told me that he had forwarded, during the past season, to the Magdalen Islands, for the use of the firm's customers there, strong iron-hooped barrels, and guaranteed to pay the packers a higher price for those, when filled, than for the old packages, and the result, he told me, was, when the fish were sent to the United States the difference in price between these and those packed in the poor barrels ranged from one and a half to two dollars per barrel.

Another party in Halifax told me of experimenting this year, for himself, in mackerel curing with good, and more expensive barrels, and the result was equally as satisfactory as in the case of the Magdalen Islands fish.

So impressed are the Robin Collas people by the extreme necessity of doing something to make the use of a thoroughly good mackerel and herring barrel, in some measure general in Nova Scotia—the same barrel should be used for both—that they have induced another large fish buying firm in Halifax, N. & M. Smith, to join them in issuing a circular letter to Nova Scotia fishermen intimating that they are prepared to pay 25 cents a barrel more for all pickled fish put up in strong iron-hooped barrels than for fish sent out in the old leaky barrels, all of which is a most gratifying step out of the old do-as-you-please rut.

This movement is, of course, a direct result of the efforts of the department in the experiment carried on during the past four seasons.

Notwithstanding those movements in the right direction, which are confined to certain districts, nothing short of the introduction of a legalized standard barrel, with a system of inspection under some sort of government control will, in my opinion, prove a beneficial and lasting improvement to the fish trade, in general, of Canada.

The British government just 100 years ago recognized the need for some such step for the fostering of its fisheries, both in regulating the style of curing and the class of barrel to be used.

During the reign of George III, in the year 1808, an Act was passed for the further encouragement and better regulation of the 'British White Herring Fishery.' In section 37 of the said Act we read as follows:—

'And the said bounty of two shillings per barrel hereby granted on white herrings shall be payable and paid to the curer or curers thereof, on the production of the fish to the proper officer of the fishery in order to be branded and certified for the bounty, and such officer of the fishery to whom any barrels of herrings shall be so produced shall examine the barrels and inspect the herrings contained in all, or in such and so many of them as he in his discretion shall think necessary for the purpose of ascertaining whether the herrings so produced are in every respect such as to entitle the curer or curers thereof to the bounty hereby granted according to the provisions of this Act.'

A little further on in the same section we read: 'and upon every barrel of herrings which, on such examination as aforesaid, shall be found by the said officer to be in all respects such as to entitle the curer or curers thereof to the bounty of two shillings per barrel, there shall be branded with a hot iron, by order and in the presence of the said officer, such mark or marks as the commissioners for the herring fishery'—the then administrative authority—'shall direct, and as shall denote that the same is deemed to be of the proper description.'

With reference to the barrel to be used, we further read in section 40 of the same Act:—

'And no white herrings shall be exported or shipped or tendered to any officer of the fishery, or to the customs, to be shipped for exportation at any port in Great Britain for any port or place whatever, unless the barrel in which the same shall be packed shall be at least half an inch in thickness at the bulge, or for any foreign port or place in Europe, unless such barrel shall be bound with sixteen hoops at the least, made of wood or iron; nor any such herrings be exported or shipped or tendered to be shipped as aforesaid, for any port or place out of Europe, unless the barrel in which the same be packed shall be a new barrel and full bound, and have one iron hoop at each end.'

In the year 1815 was passed an 'Act to continue and amend several Acts relating to the British White Herring Fishery.' In section 12 of this Act it is laid down that barrels which shall not be half an inch in thickness throughout, of made work, or shall not contain thirty-two gallons English wine measure, i.e., twenty-six and two-thirds gallons Imperial measure, shall, with the herrings contained therein, be forfeited and may be seized by any officer of the fishery, customs or excise.

The barrels referred to in the foregoing had to be constructed of hardwood,

usually birchwood, hence the comparative thinness of the stave allowed.

The present Fishery Board for Scotland, to whom the administration of the Scottish fisheries has since been transferred, now allows spruce to be used in the construction of herring barrels, but of a correspondingly thicker stave.

On those lines, then, the great herring fishery, of Scotland especially, has attained its present status, and the same regulations with respect to barrels, and the inspection and branding remain in force to the present day, except that there is now no bounty given. The trade having, as early as the year 1821 found itself able to get along without it.

There should be no difficulty in connection with the working of an inspection and branding Act, both for herring and mackerel, in Canada with its large staff of fishery officers and overseers already in existence on the coast. These officers would certainly require some teaching and drilling as to what exactly was required of them in the carrying out of such a system, but the greatest assurance for the successful working of the Act would lie in carrying out the regulations to the last letter, and making the inspection a rigid one in every way.

Inspection would take place when the goods were still in the hands of the fisherman, or other packer, whose name and place of packing would be legibly stenciled on each barrel, so, in the event of a dispute as to quality or other defect in curing, with an inland consumer, the matter may be traced to its proper source and guarded

against in the future.

The government brand would, of course, be put on none but the legalized standard barrel, which contained herring of the class designated, well cured, and packed, and would, therefore, become a guarantee to the trade throughout the country, or wherever the fish were sent, that the goods were something on which business could be done with the utmost confidence. So, in due course, merchants would refuse to buy anything but goods cured in barrels showing the government brand, fishermen and packers would, in consequence, be compelled, by the working of the trade itself, and without bounty, to take no barrel from the coopers' shops but what would be likely to pass inspection and be entitled to the brand when filled.

The inspection would be made irrespective of what style of curing the packers adopted—either split or round—so long as such style is designated on the outside of the barrel, and the contents are up to the standard demanded in either case.

The adoption of a standard barrel and a rigid system of inspection are amongst the main arguments put forward by those in Nova Scotia who are agitating for local control of the fisheries by the formation of an administrative board for that province.

I may here quote the following article, taken from the pages of a recent issue of the *Maritime Merchant* of Halifax, which bears out what I have said as to the necessity for a carefully administered inspection and branding Act.

# 'Losing Money on Herring.'

'Incidents that show the need of a better fish inspection Act in this province are constantly coming to light.

'Just a few days ago a wholesale firm showed us a letter from a Chicago firm, with

relation to our method of putting up pickled herring.

'The letter stated that the writer had recently received a shipment of Nova Scotia No. 2 herring (there were two carloads in the lot), and that he had done his best to make a sale of them, but without success. He gave as his reason that from tests made for prospective buyers it was seen that the net weights of the barrels varied so much that retailers didn't want them at all. They ran all the way from 169 to 211 pounds, and when the barrels were opened it was impossible to tell, by casual observation, which had the maximum and which the minimum quantity of fish, as where there was a shortage of the latter the packer put in enough salt to fill up. The same writer spoke of the lack of uniformity in the size of our No. 1 herring, as well.

'He said that recent tests had shown them to run from 340 to 400 count to the barrel, whereas they should have maintained an average of 350. He further said that so long as this policy of letting the retailer, who has to sell his fish by count, take chances on what he is going to get we will make no progress with pickled herring in the United States market, and it is worth noting that the same thing that spoils our prospects in that market also stands in the way of making Canada the field it ought to be for maritime provinces pickled fish. Of course this matter of inspection is only one of our weak points, but it is one which a good inspection Act properly administered could and would remedy.

'We refer to the above at the present time because we think the business men of the provinces, who are directly interested in everything that makes for improvement in the fishing industry, should join with the Fisheries Committee of the Halifax Board of Trade in urging upon the government the existing need of exacting better inspection laws and to enforce them.

'Any intelligent business man who will take the time to study the conditions under which the fisheries of the Canadian Atlantic coast are being conducted can very easily satisfy himself that the change sought submits itself as desirable, not only because of the immediate profit it promises, but also because it is a safeguard to the

perpetuation of the industry.'

The only comment I would make on the foregoing quotation is that under existing conditions, the man who originally packed the condemned herrings will go on in the same way quite unaffected by the complaint. Herrings come into the wholesale firms in Halifax in barrels without any mark other than that telling whether the contents are No. 1 or No. 2 herring, and when a complaint, such as that from Chicago, is made to the wholesale shipper he cannot tell who was the bad packer, so the packer who is minded to take advantage of the opportunity to make light weight, and mix inferior quality with good continues to do so.

Now, under the inspection and marking laws in vogue in Scotland, such a thing as the above would not happen twice.

I have known instances of complaints coming from some of the remotest regions of eastern Russia, being traced to the original packer in Scotland, the defect pointed out and guarded against in future, and so restoring the confidence of the consumer, in the Scotch product.

In my opinion then, and in that of all who have any practical knowledge of the fisheries of Canada, the present policy of the department, in trying to bring about an improvement in the pickled fish trade of this country, can only be continued and carried to its logical conclusion by the institution of some such thorough system of inspection and branding as I have indicated.

Before closing this report, I may be allowed to make a suggestion which, in my opinion, is worthy of the attention of the department, and would be an innovation

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much appreciated by the fishing interests of Canada, generally, and the predominant

cod-fishing interests particularly.

It is this: that a real 'Fisheries Intelligence Bureau' be established, under the department, at Ottawa, to take the place of the very inadequate one at present in existence at Halifax. The following is a fair sample of the kind of report at present issued giving intelligence as to the progress of the fishery at the various ports within the bureau's circuit of news collection: 'Cod, hake and lobsters fair, haddock scarce, a few herring and mackerel in nets,' or it may be 'all branches dull' at certain places, which really supplies the trade with no information of a useful kind.

An intelligence bureau in Ottawa, such as I would suggest, would begin by asking all the departments' staff of outside fishery officers, each week,—or each month, to begin with—to collect reliable figures of all kinds of sea fish landed, within their respective districts, and at the same time to find out the proportions sent fresh to

market, smoked, dried and pickled, respectively.

They would send weekly, or monthly reports of the figures, together with any noteworthy remarks concerning the fisheries in the district, to the central bureau at Ottawa.

In turn the bureau would, each week, or each month, issue for publication, in the 'press' or otherwise, the collected facts and figures of the fisheries of the whole

Dominion, during the course of the principal fishing season.

For the benefit of the very large dried codfish interests, I would further propose to establish, in connection with the bureau, a system of receiving, monthly, or bimonthly reports, through duly accredited sources, of the progress of the cod-drying industries of the United States, Newfoundland, Norway, France and Great Britain, such reports to be issued monthly, or bi-monthly, together with reports as to market conditions by the bureau, in the 'press' or otherwise, for the guidance of the Canadian salt codfish trade.

Seeing that the countries named ship this product to the same markets as Canada, reliable knowledge, such as a Dominion bureau could collect, of what is transpiring in the trade abroad, would be of the utmost importance.

I have the honour to be, sir,

Your obedient servant,

JOHN J. COWIE.

OTTAWA, December, 1908.

# APPENDIX No. 20.

# STEAM TRAWLING.

BEAM AND OTTER.

By John J. Cowie.

To the Superintendent of Fisheries, Ottawa

SIB,—While on the coast in connection with herring curing, I took occasion to ascertain, in person, the facts concerning the operations of the steam trawler Wren in our waters during the past season, and as this is an entirely new mode of fishing from a Canadian port, and further, in view of the trouble, more or less serious, which has existed in Europe, between steam-trawl fishermen and line fishermen, since its inception there, it may be of interest to the department, and of some future service, in the event of the expansion of the new industry, if I give you a description of this mode of fishing, and a report of the work of the first Canadian steam trawler during the late summer and autumn; together with my observations on trawling in general, and a sketch of what has been done, from time to time, for its regulation in Great Britain.

# DEFINITION OF TRAWLING.

In the first place, a considerable amount of confusion exists as to the use of the term trawling and what it really applies to.

The name is used on the American side of the Atlantic to denote a totally different style of fishing from that carried on under the same name in any European waters.

Trawling as understood and carried on by United States, Canadian and Newfoundland fishermen, is simply fishing for cod, haddock, and other round fish, with long lines to which are attached a great many baited hooks, at intervals of about one fathom.

Those lines are called trawls, and are set in the water, anchored, and buoyed, and hauled in from 'dories' or small boats. They stretch over a considerable portion of the fishing ground on which they happen to be set.

This mode of fishing is also common in Europe, but it is known only by the name of long or great line fishing.

The term trawling, on the other hand, as used in Europe is applied to a method of fishing which consists in the dragging of a strong bag-shaped net over the sea bottom, by either sailing or steam vessels, for the capture of both round and flat fish.

Trawling, as such then, has been carried on in European waters for very many years. As long ago as the year 1839, regulations, for the carrying on of this and other kinds of fishing in the English channel, were framed at a convention, concluded at Paris, in August of that year, between representatives of the British and French governments. Article XVI of the said convention says that 'Trawl fishing may be carried on during all seasons in the seas lying between the fishery limits which have been fixed for the two countries.' Other articles regulate the length of beam and size of mesh of the net to be used, besides laying down rules for prevention of trouble between

trawl boats and herring or mackerel boats during fishing operations, and which I shall touch upon later in this report.

There are two distinct kinds of trawling carried on in the North Sea and bearing

two distinctive names, viz.: Beam trawling and otter trawling.

Again, there are sailing trawlers—vessels propelled by wind alone—and steam trawlers—those propelled by steam.

#### THE BEAM TRAWL.

Beam trawling, being the original method, is by far the older of the two.

The instrument known as a beam trawl, as the name implies, consists of a wooden yard or beam of a length varying from 40 to 50 feet, made as a rule, of elm or some other tough wood. This beam is supported at each end by a triangular-shaped iron frame, called a head-piece, into which are fitted the ends of the beam.

The height of the beam, when resting on the head-pieces, is about four feet from the ground. The net takes the shape of a huge bag, and may be of any length from

mouth to bottom.

The upper part of the mouth of the net is fastened to the beam, and the under part, along which runs a ground rope, is secured to the bottom of the head irons, thus keeping the mouth open. The lower side of the triangular head irons is made so as to slide easily over the sea bottom, like the runners of a sleigh.

This combination then, of net, beam, and irons is dragged behind the vessel over bottom which has been found smooth enough for the purpose, and the operation is

called beam trawling.

### STEAM TRAWLING.

Up till nearly thirty years ago trawl fishing was carried on entirely by sailing vessels. With the increasing fresh fish trade, the advantages of steam vessels, not only in the dragging and handling of the cumbersome beam trawl, but in their ability to make speed to the land in any weather, with their fresh fish, soon became apparent, and in the early eighties of the last century, steam propelled vessels came into common use for trawl fishing in the British islands.

With the exception of one or two places on the south coast of England where some sailing trawlers are still in existence, steam vessels are now used entirely all

round the British coasts.

## THE OTTER TRAWL.

Not long after the general introduction of steam vessels in this class of fishery, a further advance was effected in the shape of improved and less cumbersome trawling gear.

I think it was about the year 1889 that some one, with an inventive turn of mind, hit upon the idea of keeping the mouth of the trawl-net open without the use of the

clumsy beam and irons.

The new device consists in attaching what is called a board, measuring about 5

feet by 3 feet, to each end of the mouth of the net.

The ropes by which the vessel drags the net are fixed to the boards in such a way that, as the vessel steams ahead, the pressure of the water on the inner face of the boards drives them apart and keeps the mouth of the net quite as open as the old beam arrangement.

This new kind of gear is named the 'Otter Trawl,' hence the use of the double

name 'Beam and Otter Trawling.'

I would here point out that in the making of laws regarding trawling in Canada, the two names should be used; because if 'beam' trawling only was forbidden in certain areas there would be nothing to prevent parties so inclined to go on using an 'otter' trawl in the prohibited waters.

The 'otter' invention proved so successful when first used that all steam vessels at once discarded the old beam and adopted the new otter trawl.

The advantages of the otter trawl are to be found in that it occupies very little space on board the vessel, is easier to handle, can be used over much rougher bottom,

and captures a greater proportion of round fish than the beam trawl.

Otter trawling then, is the latest, and most successful mode of capturing large quantities of fish ever put in operation. Those sailing vessels on the south coast of England, to which I have referred, continue the use of the original beam trawl for the very obvious reason that in a light wind they could not make the necessary speed to force the boards of the otter trawl apart and keep the mouth of the net open, consequently, they go after the slower-moving flat fish with the beam trawl.

# OPERATIONS OF THE 'WREN.'

The Canadian trawler Wren, at present fishing on the Nova Scotia coast, uses the otter trawl in her operations, and this brings me to the point of giving you a sketch of what she has been doing and on what fishing grounds she has operated during the six months she has been in Canadian waters.

The Wren is a steel vessel of 95 feet keel and has a speed of 10 knots, ordinarily. She belongs to the smaller class of steam trawlers; none have been built within the last three or four years under 120 feet keel, and with a correspondingly greater speed.

The trawler arrived at Canso, Nova Scotia, from Grimsby, England, about the middle of June. After replenishing her coal bunkers and putting her fishing gear in order, she set out on her first trip to the Atlantic bank known as 'Middle Ground,' which lies about 45 miles south of Canso.

Two day's fishing on this bank resulted in the capture of about 15 tons of haddock, mostly of a large size, besides 200 codfish and 10 boxes of flat fish, said to be plaice. More plaice were thrown overboard, however, than were brought ashore, as well as large quantities of skate, or rays, there being no market for those classes of fish at present.

After this trip the vessel was sent to the Bay Chaleur, with headquarters at Paspebiac, in Bonaventure county, where she continued fishing during the month of July.

The sea bottom near the mouth of the bay was found to be somewhat rough for trawling, which resulted in a considerable amount of damage to the net. In the upper reaches of the bay where the bottom was more suitable large quantities of very largesized cod were caught, but few haddock and flat fish. Daily landings of from 5 to 7 tons were made at Paspebiac, about one hour's run from the fishing grounds.

In August, Halifax was made the headquarters, and the grounds fished were those

in the Atlantic off the Nova Scotia coast.

Salt was taken on board at Halifax and a salt fishing trip made to 'Banquereau' which lies from 90 to 100 miles from Halifax.

As a result of this trip the trawler returned to port in ten days with about 25 tons of salted cod and haddock. Plaice and skate were also numerous here, but only small quantities were taken to port.

Quite as many fish could have been landed in half the time, but the crew was not large enough to split and salt the fish as quickly as the trawl could bring them on

Another salt fishing trip of eleven days duration resulted in the landing of about 30 tons made up mostly of cod, plaice and skate again being plentiful.

With regard to the flat fish taken, I may say that I doubt very much if they are the real plaice. I rather think they are common 'flounders.' The real plaice would be in greater demand, I think, and none would be thrown overboard.

During my four years experience on the coasts of Canada, I have seen many 'flounders' landed but no real plaice.

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Unfortunately I had not an opportunity of seeing any of the so-called plaice taken

by the trawler during the past summer.

While the Wren was at work on 'Banquereau' twelve French trawlers of the largest class were also engaged trawling on the same grounds, and observers on board the Wren were of the opinion that those boats with their greater power and larger net, were catching much larger quantities of fish at each drag than the Wren was taking.

In September the Wren was hired by a Halifax fresh fish merchant to supply him with fresh haddock, making Hawkesbury, in the Strait of Canso, her landing place, and when I left the coast, last month, she was still working on that engagement.

The fishing grounds she worked on in this connection were those lying off the east

coast of Prince Edward Island and around Cape George, Antigonish county.

As a rule she made two trips a week, when the weather made such possible, returning to port on Wednesdays and Saturdays.

Fish were found extremely abundant in these waters, and her usual landings for

each trip ran from twenty to twenty-five thousand pounds of large sized haddock.

Strange to say, those haddock were being taken and landed almost three months before the time—supposed by local fishermen—when the haddock fishing season begins. There were few, or no line boats fishing for haddock during September and October on the grounds so successfully worked by the Wren.

The quantity mentioned as landed, however, did not represent anything like the quantity actually caught. As the buyer would take nothing but the extra large fish, many good sized haddock had to be thrown overboard, as well as all the skate and flat

fish, as useless.

Equal success, as regards quantity, was met with on the occasion of one or two

trips made to the grounds near the southern coast of Cape Breton.

As a result of the Wren's fishing, so far, it has been proven that fish are exceedingly more abundant in Canadian waters than in any of the waters surrounding the British islands, the famous 'Dogger Bank' not excepted.

On the other side of the Atlantic the usual length of time for the net to be in the water during one drag, before heaving up, is from four to five hours, while, in Canadian waters, the *Wren* could only drag one hour when the net became so filled with fish that it had to be hove up and emptied.

### PROSPECT'S OF DEVELOPMENT.

In spite of this great abundance of fish, however, it is somewhat doubtful if steam trawling will become in any degree common in Canada for many years yet, owing to the lack of a fresh fish market of any great extent, and the price of salt fish being too low, generally, to permit of a steam vessel depending largely on the latter class of trade for profit.

The French trawlers previously mentioned fish entirely for the salt-fish trade, but those vessels are paid a considerable bounty by the French government on every quintal of cod cured, which makes it possible for such boats to come to this side and en-

gage profitably in that class of fishing.

It is the great fresh fish markets which have been opened up within the last twenty years in every little town and city all over the country, by the splendid facilities for transportation offered by the various railway companies of Great Britain, on which British trawlers depend almost solely for profitable working.

The price of fresh haddock, which constitutes the bulk of the catches, in the course of a whole year, for instance, in Great Britain, never falls below 10s. (\$2.50) per hundred pounds, and often touches 20s. (\$5)—I here refer to the larger sized haddock—as against the fixed price of \$1.25 paid for the same class of fish to the Wren in Canada.

Although the price paid for fresh fish on the coast here is only half the lowest price paid to fishermen in Great Britain, on the other hand, the price paid by the

consumer in Canada is actually nearly double what the consumer pays for his fresh fish on the other side of the water, except in the case of the finer varieties of flat fish.

The greater volume of business done by the fish merchants of Great Britain, and the keener competition, I suppose, leads them to look for smaller profits per pound, or cwt., which is reflected in the comparatively cheap price to the consumer and the greater quantity consumed. Transportation charges are, of course, higher in Canada than in Great Britain. Added to the better prices for the classes of fish named, the British trawler finds a ready market for practically every kind of fish taken in his net, nothing being wasted. Flat fish, such as soles, and turbot, often fetch as much as \$20 per hundred pounds at the vessel's side, although the variety is somewhat scarce.

Further, in the Scottish Fishery Board's report for the year 1906, I find that the total quantity of round fish, i.e., cod, haddock, hake, and ling, landed in Scotland during the year named was 2,284,368 cwts., and out of that quantity only 81,967 cwts. were salted and dried, the greater bulk being landed fresh at good prices.

I do not know the exact figures for Canada, but I know that the trade is just the opposite to that in Scotland, in about a similar proportion.

This then is what makes me doubt the possibility of trawling taking a very great

hold in Canada, in the immediate future, at least.

The greatly scattered population, and the long railway haulage, especially in the summer heat, when real fresh sea fish is a most desirable article of diet, are against the rapid development of a fresh fish trade in this country.

At the same time, I must point out that fish merchants on the coast time and again are without a single pound of fresh fish with which to supply the increasing orders of their customers. For instance, the merchant who has been taking the catches of the Wren has been able to handle and dispatch nearly 20 tons a week of fresh haddock all over the country, during the last three months, which would never have been taken out of the sea but for his enterprise in employing the steam trawler. and there can be no doubt that much more could be done in the way of developing a greater fresh fish trade in the Dominion, if fish merchants could count upon getting a steady supply of real fresh fish such as might be assured by the employment of steam trawlers.

I think it is now beyond a doubt that trawling has come to stay here, and although its development will, of necessity, be slow, nevertheless, looking to the time when Canada will have many more millions of people within her borders than she now has, when railway rates have been reduced, and the distributing facilities will have been increased to keep pace with the expanding trade, I believe there will be seen a fleet of Canadian steam trawlers running in from the Atlantic grounds with daily supplies of wholesome fresh food fish.

Such a fresh fish trade need not, and will not, expand at the expense of the

present cod-fishing industry.

So long as there remains a demand throughout the world for salted codfish, so long will fleets of line-fishing schooners, owing to the comparative cheapness of the method, continue to be fitted out to supply it.

## EFFECTS OF MUCH TRAWLING.

The cry may be raised, however, that with the increased operations of steam trawlers, the sea will become depleted of fish, and that line fishermen will awake some day to find their occupation gone. Well, much has been said and written in Great Britain since the introduction of trawling, as to its destructive effects on fish life. and its tendency to waste the resources of the sea, generally, and more especially since the great development of the industry by the use of steam.

Parliament has been called upon, from time to time, to legislate for the restriction and prohibition of trawling within certain limits, with a view to protecting the home waters and the narrower seas, and to insure that the line fisherman—who is still an important factor in the national fisheries—may with safety leave his baited line on the inshere grounds, and have some hope of reward for his labour.

I have always maintained in the 'press' and otherwise, that trawling within limited sea areas is most destructive, and, apart from the fact that the many line fishermen, who depend for a living entirely on what the baited line captures, have some rights, held that the compelling of the steam trawler to keep to the open sea, and the offshore grounds is a wise and necessary measure for the protection and insurance of the fish supply, from inshore grounds.

At the same time, I cannot agree with those who assert that trawling, if long continued offshore, as well as inshore, is destined to deplete the sea of food fishes.

Notwithstanding the alarming prognostications of a sea denuded of fish life, and ruined, and idle line-fishing fleets, put forth at the recent international conference at Washington, U.S.A., as the results expected to attend the use of the otter trawl on the Atlantic 'banks,' the facts and figures concerning trawling in the comparatively narrow North Sea, where the method is so old, and the fleets so large, do not at all lend themselves to such alarmist views.

The absolutely reliable figures of the Scottish Fishery Board in relation to trawling in Scotland, tell quite a different story, and prove that the total quantity of fish landed by trawlers, each year, keeps pace with the increase in the fleet. I take the Scottish Board's figures as they are more readily got at, but the figures of the English Board of Agriculture and Fisheries, and those of the Irish Fishery Board, show the same results. I therefore, give below the landings of the Scottish trawling fleet, from the year 1898 to that of 1906. In the former year the fleet numbered 149, and in the latter 274 steam vessels, and you will observe the marked rise in the yearly total, in hundredweights, as the fleet increases. The figures may be verified by any one:—

Year.	Trawlers. Cate	ch.
1898	$\dots$ 149 $778,7$	731 cwts.
1899	207 980,	
1900		164 "
1901		072 "
1902	$\dots 275   1,465,$	073 "
1903		370 "
1904	$\dots 270$ 1,705,	633 "
1905	1,745,	431 "
1906	$\dots 274$ 1,870,	517 "

But, further, to come down to the present year, I find in the London Fish Trades Gazette a report, from its Aberdeen correspondent, of the week's fishing ending November 14th last, in which he says:—

'Arrivals report that finer weather conditions have seldom, if ever, been experienced in the month of November, and the result is seen in abundant supplies, with consequent low prices.

Almost every one connected with the trade is hoping for a gale to clear the markets. Fish has been too *plentiful*, not only here, but all along the coast, and quotations have to be cut so keen that profits are almost microscopic.

It may also happen that it is impossible to place orders however low the price.'

Those figures and facts speak for themselves, and do not, by any manner of means, show signs of a decline in the productiveness of the sea.

On the contrary, notwithstanding all the increased outlets for the product, the trade finds itself actually overpowered with the supply, on occasion, and the consumers surfeited.

He is devoid of reaon who would belittle or ignore the importance of the great trawling industry as a means of keeping up an important food supply to the people of the British islands.

#### RESTRICTIVE LEGISLATION.

Nevertheless, it has been found reasonable, and necessary, as I have said, to place restrictions upon it in the breeding areas near the shore, and in the narrower waters and bays of the British islands. I shall therefore endeavour to give you a sketch of the legislative steps taken from time to time to regulate the industry by the Imperial parliament and the Scottish Fishery Board.

The line fishing interests of England are trifling as compared with those of Scotland, hence the reason that many of the following restrictions apply to Scotland only.

Great Britain, it may be said, is the home of the steam trawler.

Close upon 2,000 of these vessels are owned, and operated in the three kingdoms, as against less than half that number belonging to the combined countries on the other side of the North Sea.

The first mention of trawling regulations is to be found in the articles of the convention held in 1839 between representatives of France and Great Britain, for the regulation of the fisheries, and the guidance of the fishermen in the seas lying between the coasts of the two countries:—

Article II defines the exclusive fishery limits, or territorial waters, of either country, as that within 3 miles, geographical, from low water mark, and with respect to bays, the mouths of which do not exceed 10 miles in width, 3 miles from a straight line drawn from headland to headland.

Article XVI permits trawl fishing at all seasons in the seas lying between the fixed fishery limits of the two countries.

Article XXIV forbids trawl fishing in all places where there are boats engaged in herring or mackerel drift-net fishing.

Article XXV says that trawl boats shall keep at a distance of at least 3 miles from all boats fishing for herring or mackerel with drift-nets.

Article XXVI provides that when herring or mackerel boats shall commence fishing in any place whatever, the trawl boats which may be already fishing in such places shall depart therefrom and keep at the distance of at least 3 miles.

With the exception of regulations as to the length of the beam in the old trawling gear, and the size of mesh of the net, to be used, there is nothing further mentioned in the Paris Convention of 1839 with respect to trawling.

Representatives of both countries again met in 1868 and revised the articles of

the 1839 convention, but no change was made concerning trawling.

In 1881 the British parliament by an Act, called the 'Clam and Bait Beds Act,' empowered the board of trade to make an order for restricting, or prohibiting the use of beam trawls within clam or other bait bed areas in the event of trawling being found injurious to such.

In 1882, an Act was passed creating a fishery board for Scotland.

All the powers and duties previously conferred on the Commissioners of British White Herring Fishery, by various Sea Fishery Acts, and relating to the fisheries of Scotland, were by this Act transferred to the new board.

In 1883 an international convention was held, for the purpose of regulating the fisheries of the North Sea outside territorial waters, by representatives of Great Britain, Germany, Belgium, Denmark, France and Holland—Norway and Sweden later adhering to its various articles.

At the North Sea Convention, the exclusive fishery limits of each country as defined in the Franco-British Conventions of 1839-68 were agreed to, and extended to all the coasts of the British islands, including the channel islands.

The only reference which occurs in the North Sea Convention with respect to trawling is contained in article XIX, which reads as follows:—

'When trawl fishermen are in sight of drift-net, or of long-line fishermen, they shall take all necessary steps in order to avoid doing injury to the latter.

Where damage is caused, the responsibility shall lie on the trawlers, unless they can prove that they were under stress of compulsory circumstances, or that the loss sustained did not result from their fault.'

In 1885 the British parliament passed an Act called the 'Sea Fisheries (Scotland) Amendment Act'—applying to Scotland only—empowering the Scotlish Fishery Board to make by-laws to restrict or prohibit beam trawling in any part of the exclusive fishery limits of Great Britain in the seas adjoining Scotland, where such fishing is considered injurious to any kind of sea fishing within that part.

As will be observed by the following by-laws, the board began by closing small areas here and there, and gradually extending the prohibition to the full limit of its

power, except in one case.

By this year (1885) beam trawling had assumed quite large dimensions, and in consequence of the demands of line fishermen for protection against trawlers in the inshore waters, the Fishery Board proceeded, under powers of the Act just mentioned, to make restrictive by-laws.

It was also enacted in this year that steam trawlers 'shall have their registry number and port letter legibly painted, in white oil colour, on a black ground, on each

quarter as well as on the bows.'

The first by-law was passed by the Scottish Board in the year 1886, and closed the Firth of Forth, St. Andrews Bay, and the Firth of Tay, and the waters off the coast of Aberdeenshire inside of a straight line drawn between the outermost points of that coast, against beam trawling. The penalty for contravention of this by-law was fixed at £100, or imprisonment, for 60 days.

No. 2 by-law was passed in the year 1887 under powers of the 1885 Act, and prohibited beam trawling inside of three miles along the shores of the Moray Firth. The

penalty for contravention being the same as for that of No. 1 by-law.

No. 3 by-law, passed in 1887, revokes by-law No. 1, the difference being that this by-law along with by-law No. 5, passed in 1888, closes the whole east coast of Scotland to trawlers, inside of three miles from low-water mark, from Tantallon Castle to Kinnairdhead Lighthouse. The penalties for contravention remaining the same as those mentioned in previous by-laws.

The fears of the line fishermen, at the further development of trawling, became so great that parliament was again appealed to for more stringent measures to protect the home fisheries, so in 1889 an Act was passed to amend the Herring Fishery (Scotland) Acts, and other purposes relating thereto, called 'Herring Fisheries (Scotland) Act,' 1889. Section 6 of this Act prohibits beam or otter trawling within three miles of any part of the Scottish coast, except within waters specified, and permitted by the Scottish Fishery Board.

It is interesting to notice that in the history of trawling legislation, the terms 'otter trawling' are made use of for the first time in this Act of 1889.

Section 7 empowers the Fishery Board, by by-law to close, against beam and otter trawling, any area or areas within a line drawn from Duncansby Head in Caithness to Rattray Point in Aberdeenshire, and may, from time to time, make, alter or revoke by-laws for the purpose of this section.

Section 8 reads: 'It shall not be lawful to land or to sell in Scotland any fish caught in contravention of this Act, or of any by-laws made thereunder, and all superintendents and others employed in the execution of the Herring Fishery (Scotland) Acts are hereby empowered and required to prevent the landing or sale of any fish so caught.'

The two foregoing sections of the Act 1889 are the most important of all the laws and regulations ever passed against trawling in Great Britain, in that they have given rise to all the present trouble and turmoil between British and foreign trawlers over the Moray Firth question.

Under powers of the 1889 Act the Scottish Fishery Board passed by-law No. 6 which permits, under section 6 of the Act, beam trawling in the Firth of Clyde from

August 1 to April 30, provided that the vessel is propelled by sails only, and is of not more than 8 tons burden.

By-law No. 7 passed in 1890 with the same authority as that mentioned in the previous by-law, permits beam or otter trawling in the Solway Firth within 3 miles of the shore, for scientific purposes only, by persons having the written authority of the board. By-law No. 8, dealing with the Moray Firth, was passed in 1890, under powers of the Acts of 1889-90, section 7, and declares that beam or otter trawling shall not be carried on inside of a straight line drawn from the Ord of Caithness to Craighead, near Buckie, thereby closing about half the area of the Firth to trawlers. The Act of 1890 added the confiscation of every trawl net set, or attempted to be set in contravention of the board's by-laws, to the penalties already mentioned

By-law No. 9 deals with seine or circle net fishing for herring on certain parts of the west coast of Scotland and need not be taken notice of herein.

By-law No. 10 passed in 1892, still under powers of the Acts of 1889-90, section 7, revokes by-law No. 8 and provides beam or otter trawling inside of a line drawn from Duncansby Head in Caithness, to Rattray Point in Aberdeenshire.

The area defined in this by-law constitutes the whole of the Moray Firth, the width of which, at its mouth, is 90 miles, narrowing gradually until at a distance of about 60 miles from its mouth it reaches the 10-mile point defined in the North Sea Convention.

The penalty for illegal fishing within the whole area of the Firth was fixed by this by-law as a fine not exceeding five pounds for the first offence and not exceeding twenty pounds for the second and subsequent offence with confiscation of gear. The reduced penalty in this by-law was the outcome of an effort to make it easy for trawlers in the face of the apparent injustice of shutting them off from such a large body of water, while appearing the line fishermen by closing the whole Firth.

Line fishermen were not appeased, however, as the small fine had no effect in keeping trawlers from continually breaking the law, and the board passed by-law No. 14, in 1896, revoking No. 10 and raising the penalty to the old one of £100, or 60 days imprisonment.

By-law No. 11, passed in 1893, permits the use of a beam trawl in the Solway Firth, within certain limits, in fishing for shrimps, provided the vessel is propelled by sails only, and of not more than five registered tons.

By-law No. 12 was passed in 1893 under powers of the Act of 1885 to prohibit the use of a modified method of trawling, practised on certain parts of the coast, within the limits described in by-law No. 3.

By-law No. 12 was revoked by by-law No. 17, passed in 1898, and extends the area, closed to the modified method, to the whole exclusive fishery limits of the British islands in that part of the sea adjoining Scotland, in which the trailing or dragging along the bottom of the sea of any net, including a seine or circle net, shall be illegal except in the Firths of Clyde and Solway, under conditions authorized and defined by the board in previous by-laws.

By-law No. 13 deals with the method of dredging for cockles, or other shell fish around the Shetland islands, and does not call for comment here.

By-law No. 15 regulates the taking of mussels—the chief haddock bait of line fishermen in Scotland—on certain parts of the Scottish coast, and may also be passed over without comment.

By-law No. 16, passed in 1898, revokes by-law No. 6, dealing with permissions, and changes the tonnage of vessels to be allowed the use of a beam trawl in the Firth of Clyde, from that of 8 tons to 7 tons.

An 'Act for the better regulation of Scottish Sea Fisheries' was passed in 1895, in which power was granted the Scottish Fishery Board to prohibit, by by-law, beam or otter trawling within 13 miles of the Scottish coasts, but no action whatever has been taken by the Board, up to the present, in extending the prohibition limit under this Act.

The foregoing constitutes all the legislative measures passed in the British islands for the regulation of beam or otter trawling since the commencement of the industry till the present day.

# THE 'MORAY FIRTH QUESTION.'

At this moment, however, a conflict is being waged between the line fishermen of the Moray Firth and the trawling interests of England arising out of the closing of the whole of the Moray Firth to trawlers, under powers of the Act of 1889, and a Bill is meantime before parliament which seeks to extend the provisions of section 8 to the ports of England, and it may be of interest if I here try to give you an idea of what is known as the troublesome Moray Firth question, with its international aspect.

The Moray Firth is a triangular stretch of water, which lies in the northeast corner of Scotland, and is of considerable extent. To convey to you a clearer idea of the reasonableness of the line fishermen's demands, and of the enclosed nature of its waters I might cite as an example a similar area of water on the Canadian coast. Nature, however, seems to have worked on such a huge scale in the matter of lakes, and rivers and their estuaries upon this continent, that our illustration may be found in the mere mouth of a river.

Suppose, then, a straight line to be drawn across the mouth of the St. Lawrence, from the Gaspé peninsula to the shore on the north side of the river, between points where it is 90 miles wide, and another line between points where the river is 10 miles wide, and you have a reproduction of the Moray Firth in Canada. Now, the good people who live along the river shores, within those limits, if told that foreign warships, for instance, could steam far up the river, and, with the booming of their guns, wake the echoes in the Laurentian mountains, to say nothing of scaring the fish in the water, while carrying out peace-time manœuvres, claiming to be still on the high seas, they would certainly sit up, and wonder. But, if they further realized that foreign trawlers could, with impunity, continue scraping over, and destroying the fishing grounds which had hitherto been looked upon, practically, as the exclusive fishing properties of the inhabitants of the river shores in particular, and of Canada in general, they would, undoubtedly, agitate for the passing of some measure by the Dominion government to at least keep steam trawlers away.

The Moray Firth then, has always been looked upon as one of the best fishing areas on the Scottish coast, and is considered, in fact, a kind of fish nursery for the east coast. Being prolific, and comparatively sheltered, it has been always looked on, by steam trawlers, as a sort of happy hunting ground, and drew so many of these vessels to its waters, that a time at last came when the thousands of line fishermen, around its shores, found the utmost difficulty in securing enough fish, with the baited hook, to provide them with a living.

As a result of the agitation, thereby engendered, parliament passed the Act of 1889, and the Scottish Fishery Board, under the powers of that Act, passed the bylaw in 1892 which closed the whole area of the Firth to trawlers.

After the closing, only an occasional poaching trawler was seen in the Firth for some years, and the effect was plainly observed in the great increase of young fish. About the year 1896 some foreign trawlers began to visit the Firth, chiefly hailing from Norway.

These claimed the right to fish there, so long as they kept outside the exclusive three mile British fishery limit.

Now, section 8 of the Fisheries Act of 1889, prohibiting the landing or sale, in any port of Scotland, of fish caught in contravention of the Scottish Fishery Board's by-laws, does not apply to England, consequently foreign trawlers, fishing in the closed waters, found a convenient market for their fish in Grimsby, England.

Those foreigners were duly welcomed by the trawling interests of England, as it gave them a splendid excuse for appealing to the government for equal rights to British trawlers in the matter of the Moray Firth.

The number of foreign vessels that actually fished in the Firth was never very large, nevertheless, the apparent injustice of British trawlers being debarred from waters, so near to the British Isles, in which foreigners could roam at will, roused the British trawling interests to action, and they demanded a repeal of the closing Act. But, successive governments have been satisfied of the necessity of keeping the Firth closed to trawlers over whom they had control, and so the by-law remains in force.

Shortly after the appearance of foreign trawlers in the Firth, a number of English trawl-boat owners conceived the idea of changing the registry of their boats to that of Norway, to fly the Norwegian flag, and go ahead fishing in the prohibited area; so, at the present moment the majority of the trawlers working in the Firth is of this class, each of which carries one bona fide Norwegian, nominally as master, and landing their catches without hindrance in England.

This procedure became so pronounced, and annoying, that in the year 1906, one of the Fishery Board's cruisers was ordered to seize a Norwegian trawler, in the Firth, with a view to testing the question as to whether the trawling prohibition by-

law extended to foreigners or not.

The case came before the High Court of Justiciary, sitting at Dornoch, Sutherlandshire, and the master, being charged with contravening the Fishery Board's bylaw, was convicted, and penalized in conformity with the by-laws.

Following the decision of the High Court, a batch of 'Grimsby-Norwegian' trawl-masters were convicted in the Sheriff Court of Elgin, Morayshire, of a similar offence. The full penalty was imposed and some of the masters chose to go to prison.

The notice of the Norwegian ambassador in London having been drawn to the matter, he made representations to the British Foreign Office for the liberation of the imprisoned masters on the ground that they were Norwegian subjects and fishing in extra-territorial waters, and without the jurisdiction of the British courts.

Sir Edward Grey, after consideration of the whole matter, came to the conclusion that, under existing international arrangements, foreign trawlers could not be prevented from fishing in the Moray Firth outside of the recognized exclusive fishery limits.

As a consequence of this decision of the Foreign Office, the imprisoned masters were at once liberated, and the fines refunded in cases where such had been paid.

The next move in the Moray Firth tangle was made by the Secretary for Scotland in the course of the present year.

Recognizing the fact that the trawlers continuing to use the Firth were almost entirely bogus 'foreigners,' owned in and hailing from Grimsby, England, he brought a Bill into parliament seeking to make it illegal to land or sell fish in English as well as Scottish ports, caught in contravention of the Scottish Fishery Board's by-laws.

In this way it is calculated that trawling by 'foreigners' in the Moray Firth will

be practically stopped.

Considerable opposition to the Bill has naturally arisen in Grimsby, and Lord Heneage, who is president of the National Sea Fisheries Protection Association, and chief champion of the trawlers' cause, last month, moved a resolution in the House of Lords, calling on the government to suspend the Scottish Fishery Board's by-laws dealing with the Moray Firth.

The motion created a long discussion in the House, but it was ultimately withdrawn on the advice of the Marquis of Lansdowne, in view of the government's Bill which deals with the British grievance by seeking to place such disabilities on the

foreigner, in British ports, as could be legally enforced.

The Bill, in all likelihood, will become law. Mr. Asquith in replying to a question on the subject recently, in the House of Commons, said: 'The government has no intention of repealing section 7 of the Herring Fishery Act, and that the present

government Bill would remove any injustice which at present exists as between English and Scottish trawlers and foreigners."

It is admitted, however, that even if this Bill becomes law, the question is only partly solved, and an effort will, undoubtedly be made, at the next conference of the powers, signatory to the North Sea Convention, to have the Moray Firth closed to all trawlers by international agreement.

This will be found, I believe, not very difficult to accomplish in view of the fact that continental powers, bordering on the North Sea, are now passing severe measures for the regulation of trawling within their waters.

A new law has recently come into force in Norway under which fishing with a trawl is forbidden in Norwegian territorial waters, and while a trawl vessel is within such waters all fishing gear must be stowed away inboard. The nets must be detached from the trawl-boards and laid on one side, or tied up inboard.

Owners of trawlers and skippers are warned that persons found guilty of offences against this law, or against any regulations issued thereunder, will be liable to a fine ranging from 1,000 to 5,000 kroner; and that the vessel to which the guilty person belongs, with its catch and gear, may also be confiscated either wholly or in part.

In the beginning of the present year an English trawler was seized by a German cruiser for alleged fishing within German territorial waters.

The punishment meted out to the trawl-master and crew was so severe and unreasonable that it caused the British Foreign Office to interfere on behalf of the accused parties, and on investigating the circumstances of the prosecution, the fact was revealed, that on the German charts the territorial boundary line has been measured three miles from the shifting shoals which abound on that coast, and not from the permanent coast line.

This places the limit six or seven miles out to sea.

The contention has been upheld by a German court of justice, and is now a subject of discussion between the British and German Foreign Offices.

A similar attempt to this of the German authorities was made some years ago by Denmark, who claimed a reef of rocks three miles from land as the shore line, but the attempt was a failure.

With regard to the framing of laws for the restriction and regulation of beam and otter trawling in Canadian waters, I may be allowed to say that, in my opinion, all that is really necessary is the keeping of trawlers outside the three mile limit along the coast, and outside the ten mile limit in bays, with rules providing that no trawler shall fish within at least three miles of any boat or vessel which is in the act of fishing for herring or mackerel, or within three miles of any vessel anchored for the purpose of line fishing, so that line fishermen shall not live in constant fear of having their fishing gear swept away and destroyed.

Those rules, dealing with extra-territorial waters, would of course, have to be mutually agreed to, by the countries interested, to be of any use.

There need be no fear of trawl-fishing ever depleting the sea here.

The conditions on this side of the Atlantic are altogether different from those on the other.

In European waters—in the comparatively narrow North Sea—excessive fishing goes on from January to December, by an immense fleet of trawling and other vessels, and in spite of this, the total landings, as has been seen, are actually increasing rather than diminishing.

In Canadian waters, on the other hand, and even on the Grand Banks—and this should be kept in view when placing restrictions on trawling here. Owing to climatic conditions, there is an enforced close time of at least three months in each year, during which little or no fishing of any kind takes place, and during which even the operations of steam trawlers would be practically stopped.

<sup>\*</sup> Since this report was written, the Bill referred to has become law.

Indeed the Gulf of St. Lawrence, that immense fish breeding area, is practically closed to fishing from December to May, so that the fishing grounds, even if excessively worked on during the open season, would, owing to the long rest, soon become replenished.

It is therefore inconceivable that trawling can develop to such a degree, on this side of the Atlantic, as to ever appreciably diminish the extraordinary abundance of certain classes of fish such as cod and haddock, in the waters of Canada, and I think we may rest assured that its fisheries will remain a splendid heritage for all time.

I have the honour to be, sir,

Your obedient servant,

JOHN J. COWIE.

OTTAWA, December, 1908.

# APPENDIX No. 21.

NATURAL HISTORY REPORT.

To the Superintendent of Fisheries.

Sir.—I have the honour to submit my natural history report for the year 1908, which deals in particular with such observations of the lakes in the provinces of Alberta and Saskatchewan as were examined in the summer and autumn of that year. A list of the specimens exhibited by the department under my supervision, at the New Westminster exhibition is also given; and reference is made in regard to the Canadian Fisheries Museum.

Obviously those lakes situated in the prairie portions of Alberta are very different in their general physical features from those situated in the Foot-Hills region, and for this reason the fishes either indigenous to, or which if introduced would be likely to thrive best in, that portion of the province covering the area from the district of Edmonton on the north to that of Red Deer on the south, differ considerably from those in the Foot-Hills portion, the lakes of which are more or less dependent upon streams whose sources are among the mountains. The character of the lakes north of the Edmonton district is not dealt with here, but from information gathered there can be no doubt that in that part of the province there exist great bodies of water which will eventually prove to be of much importance in the interests of the inland fisheries. At present, however, there are no transportation facilities to those northern places, and time was fully occupied in making observations, some of which as it was had to be curtailed, in the more accessible and settled places in Alberta.

This report embraces all the lakes of any consequence which were visited, or concerning which direct information was gathered. It should be pointed out however that, so great are the areas wherein those lakes are situated; so inaccessible owing to the present lack of railway facilities, so many are the misconceptions as to their true physical nature even among the very people who live in the vicinity; and so varied are they in their size and general character that I was unable in the course of one season to go as deeply into the minutiae of their natural features as I would have liked to have done. The information which this report embodies was gained, in some instances, under almost insuperable difficulties—roads through sloughs and mud-holes had to be traversed, and sometimes I had grave doubts of getting in due time out of the place. All this occupies time, and tended to limit my observations of other lakes in more accessible places. It was pioneering work, but in a year or two ready access will be had to the places as railways are rapidly being constructed.

Beaver Hills Lake.—This, if we except Wabamum lake which is of different shape and dimensions, is the largest lake in Alberta, in such parts as observations of the province were made, or to which there was anything like ready access. It is situated about 50 miles east of the city of Strathcona, and can be approached from Chipman, a station on the Canadian Northern Railway. It is about 25 miles long from north to south, oval shaped, and has a width, I would say, of about 10 miles. It is comparatively shallow and of a muddy nature and not well adapted for introducing either salmonoids or black bass; although I would not say that eventually it might not be turned to some practical account in the interests of the inland fisheries. It is connected with Hastings lake by Hastings creek which flows into it, and it has an outlet, Beaver Hills creek, which eventually discharges into the North Saskatchewan river. In a short time

the facilities for reaching this lake will be much greater than at present as a station of the Grand Trunk Pacific will nearly adjoin it at its southern end.

Hastings Lake.—This lake was viewed by me at its shores, and whilst driving along the road en route to Cooking lake. It is smaller than Cooking lake, and very much smaller than Beaver Hills lake. At the present time there is no way of easily reaching it, but very soon there will be a station on the Grand Trunk Pacific within a few miles of its northern side. I was impressed with certain bays or coves of Hastings lake, which perhaps might be turned to some practical account as retaining ponds.

Cooking Lake is a summer resort, and on that account can be reached by a very good road, distant from Edmonton, via Strathcona, some 25 miles. Next year there will be a railway station adjoining it, on the northern side, on the Grand Trunk Pacific. At present the most direct route to the lake is by the Canadian Northern Railway via Winnipeg to Edmonton, and thence from Strathcona by road. It connects by an outlet with Hastings lake, and as this latter (as already pointed out) connects by an outlet, Hastings creek with Beaver Hills lake, which in turn has an outlet known as Beaver Hills creek, the three lakes may be regarded as forming a chain which eventually empties into the North Saskatchewan river. Cooking lake is some 9 or 10 miles long by 3 or 4 broad, and has, in places at least, a good sandy beach, and seems to be better adapted for black bass than either Hastings or Beaver Hills lake—certainly better adapted than the latter.

All three lakes are frequented by pike and suckers (over which black bass would doubtless in the long run gain the supremacy) and all three have excellent fish-food conditions.

Fulton Lake is a little lakelet in close proximity of Cooking lake (but not connected with it) and is mentioned here because it might sometime help to serve as a kind or auxiliary or retaining pond in conjunction with the general distribution from Cooking lake, or perhaps as an experimental pond for certain of the less choice varieties of fish. For instance, cat-fish can be transported long distances without danger, and this lakelet I believe would suit them admirably.

Ministic or Island Lake.—Whilst driving through the country I learned about a lake bearing the above name (Ministic being the Cree for island), and from all accounts there must be something attractive about it. This lake is situated back in the interior, away beyond the line through which I was travelling, so that I was unable to go to see it without deviating from the direct path in which my observations were being made. It is said to be picturesquely studded with islands, and to be a regular natural haunt of innumerable kinds of birds, but whilst I anticipate that it is likely to prove to be rich in various kinds of fishes, and ought to be kept in mind, meanwhile it can be only incidentally mentioned.

Wabamun or White Whale Lake is distant some twenty-five miles by road (not by any means a good one) from Stoney Plains the terminal station of the Stoney Plains section on the Canadian Northern Railway—Stony Plains being distant twenty-one miles, by rail, from the city of Edmonton. On approaching this lake I was impressed with its appearance, nor had I afterwards reason to regard it as inferior, although, when thoroughly examined, it turned out to be quite a different kind of lake from what I anticipated from first sight. In fact it is a peculiar lake and quite unlike anything I have ever seen before or since. Of great extent, and picturesque in itself, it is misleading to the casual observer. It is bordered all round with a dense growth of water weeds within which there is a second border of water weeds of another kind. It is a regular natural aquarium of molluscian life, untold thousands of which, with their egg masses, find here among the weeds a congenial haunt. It is frequented by whitefish, affording a good industry. The average catch indeed from Wabamun lake is to be placed at 23 lbs., whilst the average taken from Shining Bank lake—west

of the Macleod river, but a long way off from here is placed at about 6 lbs. The fishermen at Wabamun lake appears to be alive to their own interests, for whilst they fish with gill-nets nearly the whole year round they will not use, nor allow others to use, a net less than 5½-inch mesh, although the legal standard is a 5-inch mesh. Wabamun lake has an outlet which connects it with the North Saskatchewan river. It may also be said that a portion of this lake, adjoining the post office of Wabamun, forms a bay, and that the Grand Trunk Pacific will intersect this bay from the lake proper, and when I visited the place the work of construction was proceeding.

White Wood Lake.—This is a small lake of little importance, situated about six miles from the Wabamun post office. From information which I gathered about it verbally, I judged that it was of no particular account, and therefore saw no object in using valuable time in going to inspect it.

Pigeon Lake is a natural haunt of the whitefish—some 59 of which I saw, and which would average, I would say, some 23 lbs. each. This lake is distant some thirty-three miles from the city of Wetaskiwin by anything but a good road. It is some twelve miles long by some seven miles wide—its deepest part some 45 feet (7½ fathoms. It is surrounded by poplar and spruce, is sparce in water plants, has a sandy and stony beach, and adjoins an Indian reserve. Its outlet is Pigeon creek, which discharges into the Battle river.

Battle Lake is some seven miles west of Pigeon lake. It is about six miles long by three-quarters of a mile at its widest place. It is surrounded with poplar, tamarack, and spruce, and in certain parts there are rushes. It has an outlet at its southern end discharging into the Battle river, and a creek enters it at the west side. It is one of those lakes one sometimes comes across which the people speak of as bottomless; and whilst it is said to have no whitefish in it, although the Battle river, I was informed, contains them. I take it that their absence from this lake is owing to its great depth, which virtually means that the fish have no bed of resort.

Bear Lake.—This is a rather inconsequential lake, distant some ten miles from Wetaskiwin which I saw from the road whilst driving to Pigeon lake. It would be entirely unsuitable for salmonoids or black-bass.

Gull Lake is situated some nine miles from Lacombe, and is accessible by one of the best kept roads in the province. It is a summer resort, and has the finest beach of any lake examined by me in Alberta. I was obliged to examine this lake when the weather was inclement, nevertheless I succeeded in finding four different kinds of fish, viz.: ling, suckers, pike, and stickleback, but there are no whitefish in it, and as it seems to be a lake well adapted for salmonoids I can only attribute their absence to the great numbers of ling, as the ling gorge themselves with the eggs of the whitefish. The introduction of black bass would be another matter, however, for since those fish protect their eggs and young, and the eggs are deposited in masses, they and young fry would be more secure from the ravages of the ling, and the tables would surely be turned against them. In my search for inlets and outlets I only succeeded in finding some partially dried up creeks, and I presume that this lake is largely supplied by underground springs. Possibly, however, as indicated in maps, it may connect by a short creek with Blindman river—a tributary of the Red Deer river.

Lacombe or Jack-fish Lake is situated within a mile of the Canadian Pacific railway track, and within three miles of the Lacombe railway station. It is about two miles long by one-half a mile broad, and is 15 to 20 feet deep or more. The east side is sandy, the west side stony, the north and south ends muddy. The shores contain poplar, spruce, and balm-willow; the lake itself yellow water lilies, arrow-heads, rushes, and water weeds. The water was discoloured when examined, a fact which I attri-

bute to the immense amount of vegetable matter which the lake contains, but Senator Talbot who accompanied me to this lake told me that the lake is sometimes quite clear.

Talbot Lake (so named by me after Senator Talbot) is a small triangular lake, about a quarter of a mile long with a breadth slightly less, and covering an area of about 35 acres, adjoining the property of Senator Talbot. It is 10 or 12 feet deep, has an underground spring at one point, an algous growth here and there at its borders, and a muddy bottom. It is mentioned here as being close to Lacombe lake.

Buffalo Lake is about seven or eight miles from Alix railway station on the Lacombe and Stettler branch of the Canadian Pacific Railway. It is irregularly shaped, having a length of some twenty-six miles and a breadth of some twelve miles, and contains about twelve good-sized islands. Its greatest depth may be given at some 43 feet. Numerous kinds of fish such as pike, suckers, gold-eye, ling, minnows, and perch are in it; and it is reputed to contain maskinonge. It is rocky in parts, and has sand, gravel, rushes and weeds. If black bass were introduced into this lake they would likely gain the mastery over the indigenious fishes, and as a matter of fact a few black bass were introduced into this lake some years ago by Mr. Harrison Young, and Mr. Matthew Cook, one of our fishery guardians, informed me that two black-bass have since been caught. Spotted creek from Spotted lake is an inlet into Buffalo lake, and Tail creek is an outlet into the Red Deer river.

Haunted Lake.—In the proximity of the incorporated village of Alix there is a small lake bearing this name, but as it was only casually seen whilst driving to and from there during the visit to Buffalo lake, and as it is probably of little consequence, it meanwhile calls for nothing more than mention.

Sylvan or Snake and Cygnet Lakes.—Snake or Sylvan lake is distant from Red Deer railway station some fourteen miles by a good road. At the stopping place, which is kept by a French count, there is a fine sandy beach, and the bottom of the lake is sandy at this part as far as it can be seen. I explored the lake both by row-boat and sail-boat, and found it to contain in other places gravel, stones, mud, rushes, and water weeds. The food conditions for fish are excellent, and I believe that black bass might be placed in this lake, and would likely thrive. Adjoining Snake lake, and closer to Red Deer, is Cygnet lake—a much inferior lake, and which connects by a creek with the Red Deer river; but Snake lake appears to be independent of this, and is probably fed by springs.

Ghost-pine Lake.—Owing to the situation of this lake it appeared to me impracticable to spend time in visiting it to the detriment of more important work. It is a long narrow lake with Ghostpine creek for its outlet; and this creek, after flowing for a great distance, discharges into the Red Deer river.

Clear Lake is distant some thirteen and a half miles from the incorporated town of Claresholm by an excellent prairie road, and from there it was approached by me, but it is only nine miles distant from Stavely railway station. It is, I should say, some three miles long by three-quarters of a mile broad, and is reputed to be 20 feet deep. It contains sand, gravel, stones, and weeds; and manifested little evidence of containing living forms except amphipods. It is evidently alkaline, for the beach of a small island in the lake showed alkaline conditions. It has no outlet, and no inlet save a sluggish creek which is sometimes dry. Unless it were that it was discoloured by a vegetable matter when seen, and which may be a seasonal characteristic, I do not see what claim this lake has to bear the name of Clear lake. Various kinds of water birds were seen at or beside the lake, such as wild ducks, grebes, phalaropes, gulls, and shore birds; and Mr. Edgar W. Frost, who is interested in the lake, turns it to practical advantage by keeping a large number of domestic ducks and geese.

Black Spring Lake distant some fourteen miles from the town of Macleod, is roundish in shape, and covers an area of about 160 acres, and may be 18 or 20 feet deep towards its centre. Its position is, township 7, range 26 W., 4th initial meridian, section 19, some fifty miles east of the Rocky mountains, and some forty miles north of Montana. Its inlet is a small stream at the southwest end, but it has no outlet. Various living creatures were observed in the lake or frequenting its borders, and it harbours a dull coloured vegetable matter. This lake is alkaline.

There are legends among the Indians about certain lakes which have appeared in localities in the northwest where formerly they did not exist, and my investigations led me to think that such legends have a basis of fact. There was evidence to me indeed that Black Spring lake is of comparatively recent origin, and that it is gradually enlarging, and will in future in all likelihood encroach more and more upon the land.

Lee Lake distant some four miles by a mountain road from the village of Lundbrek, a station of the Lethbridge and Crowsnest section of the Canadian Pacific Railway, is a beautiful clear-water lake, picturesquely situated among the foot hills. A little clear-water creek flows out of it and empties into Little Fork river, a tributary of Old man's river. It is long and narrow and curved; its length a mile or more; its breadth variable. It has a beach of gravel and sand, picturesque islands; its waters are cool, and it contains water-weeds and rushes. Various living forms, such as amphipods, leeches, Menobranchus, water-snails, and water insects, were collected or observed, and I would have regarded it as admirably adapted for such salmonoids as frequent the streams or lakes of the foot hills, but unfortunately this lake has sulphuric conditions, and I was informed that bathers, immediately on leaving its waters are seized with nausea. As to the question as to how creatures of any kind can live in this lake, the answer is easy. Water-snails-mentioned above -respire atmospheric air, and therefore come to the surface to breath, and otherwise the food conditions of the lake will suit them; whilst some of the other creaturesmentioned above-may either thrive in or be indifferent to sulphuric conditions; but to highly organized creatures such as fishes, and especially the higher kinds, such conditions would surely prove disastrous. There are a few other small lakes in this locality which appear to have the same sulphuric character.

Lac Lajoie (so named by me after A. Lajoie, whose property adjoins this lake), distant some ten miles from the village of Pincher Creek, which is distant two and one-half miles from Pincher railway station on the Lethbridge and Crowsnest section of the Canadian Pacific railway, is, I should say, about three-quarters of a mile long by one-half a mile wide. It has clear water, and contains stone, sand, and waterweeds. Such living forms as amphipods, leeches, and mollusks, were observed. It has neither an inlet nor an outlet, and therefore must be fed by springs. There are no fish in this lake, but trout have been placed in it, apparently without success. I am, however, of the opinion that certain kinds of fish indigenous to the locality, might, if introduced, thrive in it.

So far the lakes described in this report are situated in the province of Alberta. Incidentally information concerning others was gathered, either through verbal accounts, or through observations made whilst travelling through the country, but exact knowledge of such is as yet a desideratum.

Last Mountain or Long Lake.—In so far as my knowledge as yet of the lakes of Saskatchewan goes, I would say that there is nothing to approach this excellent lake, taking into consideration its great size and general physical features in the entire province south of Prince Albert. It is exceedingly elongated, being fully sixty miles long, by four miles broad at its broadest. I regretted that I had not the opportunity of seeing this lake until my return from British Columbia, (where during the interval between my observations of lakes in Alberta, and of those in Saskatchewan,

I was engaged in other departmental work) for the days were then short, and besides when I visited, a cold wintry wave swept over the whole locality, but I gained enough information about it to convince me that it was everything that could be desired. It was observed from the southern end where it averages over two miles wide, and is about one mile across near its southern terminus. It contains sand and boulders; and is certainly frequented by such fishes as whitefish, tullibee, pike, suckers, buffalofish, pike-perch, perch, and ling. Its greatest depth may be placed at about 80 feet. Around the lake there is poplar, and the ravines on the northwest side contain maple, elm, white ash, and prairie flowers. Innumerable water birds, either seen or learned about, embrace wild ducks, geese, swans, grebes, loons, pelicans, shore birds, cranes, herons, gulls, terns; whilst hawks and owls frequent its vicinity. It also contains crayfish, aquatic insects, water snails, and some clams, so that its food conditions for fish are the best. It is distant some ten miles from Lumsden, a station on the Canadian Northern railway, and a branch of the Canadian Pacific railway is in course of construction which will have stations adjoining the lake. A boat called the Qu'Appelle, owned by the Pearson Land Company, already plies on the lake. According to Mr. Silverthorn, fishery guardian, the fish in the lake instead of diminishing are steadily increasing, and he attributes this to the damming up of its waters at its southern end by the Dominion Public Works Department. The lake is alkaline at its upper end, and it has an inlet at the north through which during the spring the freshets formed of melted snow are said to convey deleterious matter into the lake; but owing to its great proportions I do not think that either of those substances are in quantity sufficient to seriously affect it. The lake has an outlet at the south called 'the outlet,' and a little springy creek also flows into its southern end.

Qu'Appelle River System.—During my observation of the previous year (1907) a systematic examination of the lakes of the valley of the Qu'Appelle was made whilst making a collection of the fishes which inhabit them, and during the year 1908 at the time when Last Mountain lake was visited, I made a cursory observation of the Qu'Appelle river in the vicinity of Lumsden and have but to say that the lakes themselves are just expansions of this river, whereas at the place where it was viewed in the year 1908 it pursues its course more properly as a river and continues as such until it enters the head of the chain of lakes at a considerable distance from, and to the east of, where it was seen near Lumsden.

White Bear Lake.—This is certainly a magnificent lake—distant some nine or ten miles from Carlyle, a thriving incorporated town on the Arcola and Moose Mountain section of the Canadian Pacific railway. Of its kind I saw nothing finer in the two provinces. Owing to its altitude it has no inlet, but an outlet called Swift creek discharges into Moose creek, Moose creek into Souris river, and Souris river into the Assiniboine. It is some four miles long by two miles at its widest part, and has been sounded to over 90 feet. It contains pike, pike-perch, and suckers; and has an ample supply of living organisms affording an abundance of fish food. Its beach is of sand and gravel. The lake has a good-sized island, and one or two smaller islands, and it is wooded all round, mostly by poplar and birch.

Situated within a mile of White Bear lake is another large lake called Fish lake, and the two are connected by a small water way which discharges into White Bear lake. This waterway dries up during the summer months. Each of those lakes has a small lake adjoining, which respectively, virtually form a part of each lake. At the time when White Bear lake was visited various ducks, including flocks of canvasbacks, were seen, either at the lake or among the sloughs mentioned below. The town of Carlyle holds a ninety-nine years' lease of about one mile of the beach, and 500 acres of land adjoining, with fishing and boating privileges from the Indian Department—the lake being between the Moose Mountain Indian reserve.

The character of the country lying between Carlyle and White Bear lake is richly studded with a cluster of sloughs, and those were at their lowest when seen, an indi-

cation that they never dry up. These sloughs are very superior to such bodies of water generally, and have something of the character of small permanent lakelets, and I consider that if they were stocked with fish indigenous to the vicinity they would be a boon to the people.

White Lake.—This lake is situated some three or four miles from Forget, a station on the Arcola branch of the Canadian Pacific Railway, from which it is accessible by a good prairie road. It stands right on the level prairie with a hilly region to the north of it. I drove round the entire lake which is of considerable size. It is bordered all round with sand, and at places there is gravel. There are no trees nor bushes around or adjoining this lake whatsoever, nor does it contain any fish. Its waters are so cold that a bather, it is said, was seized with cramps and was drowned. It is fed by springs, and has neither inlet or outlet. Its greatest depth is some 20 feet. Its dimensions are about half a mile by half a mile. It is on section 2, township 9, range 2, west of 2nd initial meridian.

Rock Lake is distant some four miles from the village of Heward on the Arcola branch of the Canadian Pacific Railway. It is large but rather inferior, although outwardly somewhat of the character of White lake. It has an inlet at the northeast end. I walked upon its frozen borders and could see living forms swimming about under the ice. Wild ducks and geese were seen upon its surface.

Deep Lake is distant some nine or ten miles from Indian Head on the main line of the Canadian Pacific Railway. It is three or four miles long by about half a mile broad. It is somewhat alkaline. It is stony at places, and at some parts becomes suddenly deep. It is reputed to contain small fishes, and contains certain living creatures. When seen it was frozen. A narrow stream connects it with Lake Margarite, which is about one mile distant to the southeast, and it has an outlet—a stream running into the Qu'Appelle system. Lake Margarite is boggy, and contains fresh-water snails. Stramberry lake, adjoining, is something of the same character, but smaller. The three lakes are probably fed by springs.

The practicability of turning certain sloughs and small lakes into ponds for catfish is a matter to which I desire to call attention. Catfish could be so easily transported long distances from the east, and there are numerous bodies of water in the
Northwest into which they could be suitably introduced, and would form quite a
valuable adjunct to the fishes which may already inhabit certain lakes of this sort
in the west. In particular the sloughs in question near Carlyle might well be turned
to good account by the introduction of this species, and I am not aware that they
as yet contain any kind of fish. Again there is a species of grayling which I came
across in the clear streams of the foot hills region, and since the settlers in that region
clamour, for trout, they might well experiment, on their own account, by stocking
their lakes with this excellent and readily obtained salmonoid.

As to the establishment of subsidiary hatcheries there are numbers of suitable places in the Northwest where such could be constructed, but it seems premature just yet to even suggest any places as particularly suitable. Still Gull lake for Alberta, and White Bear lake for Saskatchewan might meanwhile be mentioned as very well adapted, and such places whilst not too far away themselves from railways, would serve admirably as centres for distributing the fry to lakes situated far back in the interior.

During the autumn of 1908, in the interval between my observations of the lakes in Alberta, and of those in Saskatchewan, I was entrusted with the setting up and supervision of a fishery exhibit at the New Westminster exhibition. The site for this purpose was a space at the north end of the industrial building, the dimensions of which were about 58 feet long, 20 feet wide, and 16 feet high. About one-half of this space was allotted to aquaria containing living fishes, and a model fish-hatchery with trays containing eggs, showing the process of hatching out the fish fry; and the

other half, and also the walls, were allotted to an exhibit of mounted fishes, aquatic birds, and various other natural history specimens. The general character of the display may be best judged of by the following list of exhibits.

# Fishery Hatchery:

Eggs of the Spring Salmon and of the Sockeye Salmon in incubator trays. Eggs of various Fraser River Salmonoids preserved in formalin.

# Aquaria containing living fishes, viz.:

Cohoe Salmon (Oncorhyncus kisutch.) Sockeye Salmon (Oncorhyncus nerka).

Cut-throat Trout (Salmo clarkii).

Atlantic Salmon (Salmo salar).

Speckled Trout (Salvelinus fontinalis).

White Sturgeon (Acipenser atransmontanus).

# Mounted specimens from Canadian Fisheries Museum:

- a. Common Pike (Lucius lucius).
- b. Small-mouthed Black-bass (Micropterus dolomieu).
- c. Cod-fish (Gadus callarius).
- d. Pike-perch (Stizostedion vitreum).
- e. Salmon trout (Cristivomer namaycush).
- f. Striped Bass (Roccus lineatus).
- g. Haddock (Melanogrammus aeglifinus).
- h. Gar-pike (Lepidosteus osseus).
- i. Porpoise (Phocaena communis).

# Biological Station, British Columbia:

Numerous marine invertebrates in flat table-cases and ornamenting the walls. Living Lampreys (*Lampetra cidaria*).

Loaned through the courtesy of Rev. Mr. Taylor.

Samples of Atlantic Coast Lobsters (*Homarus americanus*), transplanted to the Pacific coast of British Columbia, and various aquatic specimens.

Office of Inspector of Fisheries, New Westminster.

Coelenterates, ear-bone teeth and skin of whales.

Office of Inspector of Fisheries, Nanaimo.

Wood-duck (Aix sponsa) and fossil shells.

Loaned by W. H. Keary, mayor of New Westminster.

# Carnegie Library, New Westminster:

Mounted Wapiti (Cervus canadensis).

Wapiti antlers.

Mounted birds:

- 1. Bonaparte's Gull (Larus philadelphia).
- 2. Pied-billed Grebe (Podilymbus podiceps).
- 3. Bonaparte's Gull (Larus philadelphia).
- 4. Pigeon Guillemot (Cepphus columba).
- 5. Dark-bodied Shearwater (Puffinus griseus).
- 6. Oyster-catcher (Haematopus palliatus).
- 7. Pigeon Guillemot (Cepphus columba).
- 8. American Golden-eye (Clangula clangula americana).
- 9. American Bittern (Botaurus lentiginosus).
- 10. Barrow's Golden-eye (Clangula islandica).
- 11. Horned Grebe (Colymbus auritus).

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- 12. Ring-necked Duck (Aythya collaris). Female.
- 13. Ring-necked Duck (Aythya collaris). Male.
- 14. Horned Grebe (Colymbus auritus).
- 15. Northern Pileated Woodpecker (Ceophloeus pileatus abieticola).
- 16. Brandt's Cormorant (Phalacrocorax penicillatus).
- 17. Buffle-head (Charitonetta albeola).
- 18. American Herring Gull (Larus argentatus smithsonianus).
- 19. Western Grebe (Æchmophorus occidentalis).
- 20. Holbæll's Grebe (Colymbus holbælli). Male.
- 21. Holbæll's Grebe (Colymbus holbælli). Female.
- 22. Ring-necked Pheasant (Phasianus torquatus).
- 23. Snowy Owl (Nyctea nyctea).
- 24. Lutescent Warbler (Helminthophila celata lutescens). 25. Pallid Horned Lark (Octocaris alpestris leucolaemus).
- 26. Western Golden-crowned Kinglet (Regulus satrapa olivaceus.)
- 27. Northwestern Red-wing (Agelaius phanicus caurinus).
- 28. Red-backed Rufus Humming-bird (Selasphorus rufus).
- 29. Lapland Longspur (Calcarius lapponicus).
- 30. Western Warbling Vireo (Vireo gilvus swainsonii).
- 31. Pallid Horned Lark (Octocaris alpestris leucolaemus).
- 32. Swainson's Hawk (Buteo swainsonii).
- 33. Gadwall (Chaulelasmus strepera).
- 34. Harlequin Duck (Histrionicus histrionicus). Female.
- 35. Long-tailed Duck (Harelda hyemalis). Female.
- 36. Sanderling (Calidris arenaria).
- 37. Mourning Dove (Zenaidura macroura).
- 38. Sanderling (Calidris arenaria).
- 39. Northern Phalarope (Phalaropus lobatus).
- 40. American Hawk Owl (Surnia ulula caproch).
- 41 Black Turnstone (Arenaria melanocephala).
- 42. Grey Ruffed Grouse (Bonasa umbellus umbelloides).
- 43. Hermann's Gull (Larus heermanni).
- 44. Herrmann's Gull (Larus heermanni).
- 45. White-tailed Ptarmigan (Lagopus leucurus).

Shell, Sea-urchins, etc., and Wapiti Head ornamenting the walls. Loaned by Mr. J. W. Irwin.

Two mounted Cock Pheasants (*Phasianus colchicus*). An introduced species. Loaned by Alderman Shiles.

Skin Canoe suspended from the roof.

During the fiscal year 1908-9 a number of various kinds of fishes and aquatic birds were procured and mounted and added to the collection of the Canadian Fisheries Museum at Ottawa and arrangements are under way whereby the collection will be enhanced with specimens from both the Atlantic and Pacific slopes as well as from the fresh water lakes and rivers. The number of visitors to the museum during the fiscal year approximated 20,000 persons.

Respectfully submitted,

### ANDREW HALKETT,

Naturalist Department Marine and Fisheries.









